Biodiversity Data Journal 14: e163787
doi: 10.3897/BDJ.14.e163787

open access

Taxonomy & Inventories

New records of semi-aquatic bugs (Hemiptera, Heteroptera, Gerromorpha) from the South Region of Brazil

Carla FB Floriano‡, Nathália de Oliveira Paiva‡, Isabelle da Rocha Silva Cordeiro‡, Cleilton Lima Franco‡,§, Juliana Mourão dos Santos Rodrigues‡, Felipe Ferraz Figueiredo Moreira‡

‡ Fundação Oswaldo Cruz, Instituto Oswaldo Cruz, Laboratório de Entomologia, Rio de Janeiro, Brazil
§ Universidade Federal Rural do Rio de Janeiro, Programa de Pós-graduação em Biologia Animal, Seropédica, Brazil

Corresponding author: Carla FB Floriano (carlla.floriano@gmail.com)

Academic editor: Jader Oliveira

Received: 01 Jul 2025 | Accepted: 05 Sep 2025 | Published: 05 Feb 2026

Citation: Floriano C, Paiva NO, Cordeiro IRS, Franco C, Rodrigues JdosS, Moreira FF (2026) New records of semi-aquatic bugs (Hemiptera, Heteroptera, Gerromorpha) from the South Region of Brazil. Biodiversity Data Journal 14: e163787. https://doi.org/10.3897/BDJ.14.e163787

Abstract

Background

Semi-aquatic bug (Hemiptera, Heteroptera, Gerromorpha) constitute a monophyletic group of predatory insects that play crucial roles in limnic environments. The Oriental and Neotropical regions harbor the richest faunas, but many species from these areas remain undescribed, and large regions are still poorly explored. In Brazil, semi-aquatic bugs have been more thoroughly sampled in the North and Southeast regions, while other regions have been neglected. The Southern Region of the country comprises the states of Paraná, Santa Catarina, and Rio Grande do Sul, from which 20, 44, and 28 species of Gerromorpha have been recorded, respectively. In total, 61 species are known from the region, which is likely far from being an accurate representation of the local fauna.

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New information

Here, we present new state records of 24 species of Gerromorpha from the State of Paraná, nine from Santa Catarina and six from Rio Grande do Sul. Furthermore, of the 45 species that we studied, 36 are recorded for the first time from at least one of the three States. Our results also include one first record from Brazil and 14 from the South Region. Additionally, we identified and provide illustrations of a male of *Mesovelia amoena* Uhler, 1894, which is extremely rare in the Neotropics. Finally, the new data presented here increases the number of semi-aquatic bug species known from the South Region from 60 to 75.

Keywords

aquatic insects, faunistics, Neotropical Region, true bugs

Introduction

Aquatic and semi-aquatic bugs (Hemiptera, Heteroptera, Nepomorpha & Gerromorpha) constitute monophyletic groups of mostly predatory insects that play crucial roles in limnic environments (Barbosa and Rodrigues 2015, Moreira 2015). The Oriental and Neotropical Regions harbour the richest faunas, but many species from these areas remain undescribed and large regions are still poorly explored (Polhemus and Polhemus 2007, Polhemus and Polhemus 2008). Although there is no updated checklist or catalogue of the Neotropical fauna, Colombia and Brazil are likely the two countries in the region with the highest numbers of species, as has been demonstrated for some of the included taxa (Molano et al. 2005, Moreira et al. 2011a, Padilla-Gil and Moreira 2013).

The latest article compiling information on the aquatic and semi-aquatic bugs recorded from Brazil listed 479 species of Gerromorpha and Nepomorpha from the country (Moreira et al. 2011a). Out of them, 145 had been recorded from the Brazilian South Region, which comprises the States of Paraná (50 species), Santa Catarina (89) and Rio Grande do Sul (61). The higher diversity found in the State of Santa Catarina State can probably be explained by the huge collecting efforts of the naturalist Fritz Plaumann in the early 20th century, concentrated in the surroundings of the locality of Nova Teutônia, now part of the Municipality of Seara (Moreira et al. 2011a).

Although stagnant for decades, collecting effort targeting Gerromorpha in southern Brazil has increased since 2011 and the Taxonomic Catalogue of the Brazilian Fauna now indicates the presence of 61 species in the region. From this total, 20 species have been recorded from the State of Paraná, 44 from Santa Catarina and 28 from Rio Grande do Sul (Moreira 2025a, Moreira 2025b, Moreira 2025c, Moreira 2025d, Moreira 2025e). However, there is only one recent study focusing on the semi-aquatic bugs from the region (Rodrigues et al. 2021), whereas all other records are sparse in literature (e.g.

Moreira and Campos (2012), Rodrigues et al. (2012), Floriano et al. (2017), Rodrigues and Moreira (2016), Moreira et al. (2020), Rodrigues et al. (2021), Armisén et al. (2022), Heiss et al. (2022)). Here, we present new records of Gerromorpha from southern Brazil, based mostly on recently collected material, as well as an updated list of the species known from the region.

Materials and methods

For this study, we performed a series of field trips to the South Region (Fig. 1), from 2016 to 2024. We collected in 21 municipalities of the States of Paraná (PR) (Balsa Nova, Cianorte, Faxinal, Marialva, Morretes, Quatro Barras, Ponta Grossa, Tibagi, Tuneiras do Oeste), Santa Catarina (SC) (Águas Mornas, Blumenau, Corupá, Indaial, Mafra, Praia Grande, Rancho Queimado, Rio Negrinho, Santo Amaro da Imperatriz, São Bonifácio, Urubici) and Rio Grande do Sul (RS) (Cambará do Sul). Amongst the collecting stations, we included four federal conservation areas (States between parentheses): Parque Nacional da Serra de Itajaí (SC), Parque Nacional de Aparados da Serra (SC, RS), Parque Nacional da Serra Geral (SC, RS) and Reserva Biológica das Perobas (PR). This recently collected material is preserved in ethanol and deposited in the Coleção Entomológica do Instituto Oswaldo Cruz, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil (CEIOC).

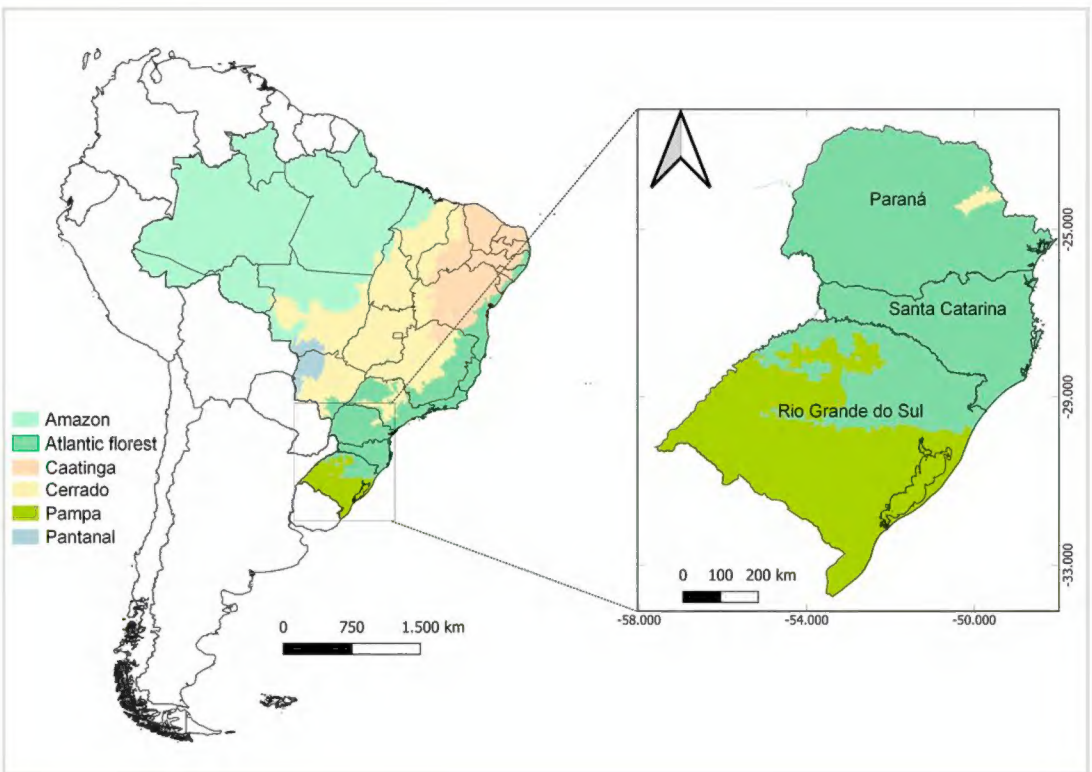

Figure 1. doi

Maps showing the Brazilian biomes and the South Region of Brazil (study area).

We examined additional material deposited in the following institutions: Coleção Entomológica Prof. José Alfredo Pinheiro Dutra, Laboratório de Entomologia, Departamento de Zoologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (DZRJ); Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil

(MZUSP); and National Museum of Natural History, Smithsonian Institution, Washington D.C., United States (NMNH).

We obtained photographs of the specimens using a Leica M205 C stereomicroscope coupled with a Leica DMC 2900 digital camera and combined the images into single composite figures using the Leica Application Suite V.4.7 extended depth of focus module. We made enhancements to the images using Adobe Photoshop CS5. We produced maps using Qgis 2.6.1. The distribution presented for each species is according to Moreira (2025a), Moreira (2025b), Moreira (2025c), Moreira (2025d), Moreira (2025e) and abbreviations of Brazilian states are according to the official standard (Instituto Brasileiro de Geografia e Estatística 2025). We identified specimens using keys provided by Nieser and Melo (1997), Moreira (2015), Rodrigues and Moreira (2016), Moreira et al. (2020), Magalhães et al. (2021) and Rodrigues et al. (2021) and, whenever possible, by comparison with type series specimens.

Gerromorpha from the South Region of Brazil

Family Gerridae Leach, 1815

Subfamily Charmatometrinae Matsuda, 1960

Genus *Brachymetra* Mayr, 1865

Brachymetra albinervus (Amyot & Serville, 1843)

Brachymetra albinervus subsp. *albinervus* (Amyot & Serville, 1843)

Materials

a. taxonRank: Subspecies; genus: *Brachymetra*; specificEpithet: *albinervus*; infraspecificEpithet: *albinervus*; scientificNameAuthorship: (Amyot & Serville, 1843); stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Rio dos Bugres; decimalLatitude: -26.2772; decimalLongitude: -49.5344; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 1; sex: male; lifeStage: adult; recordedBy: T. Roeli & T. Polizei; identificationID: *Brachymetra albinervus albinervus*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 0FE88511-3664-56FC-963E-57FBFC28BFD6

b. taxonRank: Subspecies; genus: *Brachymetra*; specificEpithet: *albinervus*; infraspecificEpithet: *albinervus*; scientificNameAuthorship: (Amyot & Serville, 1843); stateProvince: Paraná; municipality: Marialva; locality: Ribeirão Sarandi, Cachoeira Marialva; decimalLatitude: -23.4423; decimalLongitude: -51.7695; samplingProtocol: "D" Net; year: 2024; month: III; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Brachymetra albinervus albinervus*; identifiedBy: I. R. S.

Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A2BDC6AF-68B1-5B15-9B1D-ED79FFD12248

Distribution: Guatelama, Honduras, Guadeloupe, Dominica, Martinique, St. Lucia, Costa Rica, Panama, St. Vincent & the Grenadines, Grenada, Trinidad & Tobago, Colombia, Venezuela, Suriname, French Guiana, Brazil, Ecuador, Peru and Paraguay.

Notes: First records from Paraná and Santa Catarina. Previously reported from Rio Grande do Sul by Rodrigues et al. (2021), (Fig. 2A, Fig. 4A).

Figure 2. doi

Gerridae from the South Region of Brazil, male, habitus, dorsal view. **A** *Brachymetra albinervus alvinervus*; **B** *Neogerris lubricus*; **C** *Tachygerris adamsoni*.

Figure 3. doi

Gerridae from the South Region of Brazil, habitus, dorsal view. **A–B, D, F–I**: Male. **C, E** Female. **A** *Microvelia braziliensis*; **B** *Microvelia hamadae*; **C** *Microvelia hambletoni*; **D** *Microvelia hinei*; **E** *Microvelia ioana*; **F** *Microvelia limaiana*; **G** *Microvelia longipes*; **H** *Microvelia lujanana*; **I** *Microvelia mimula*.

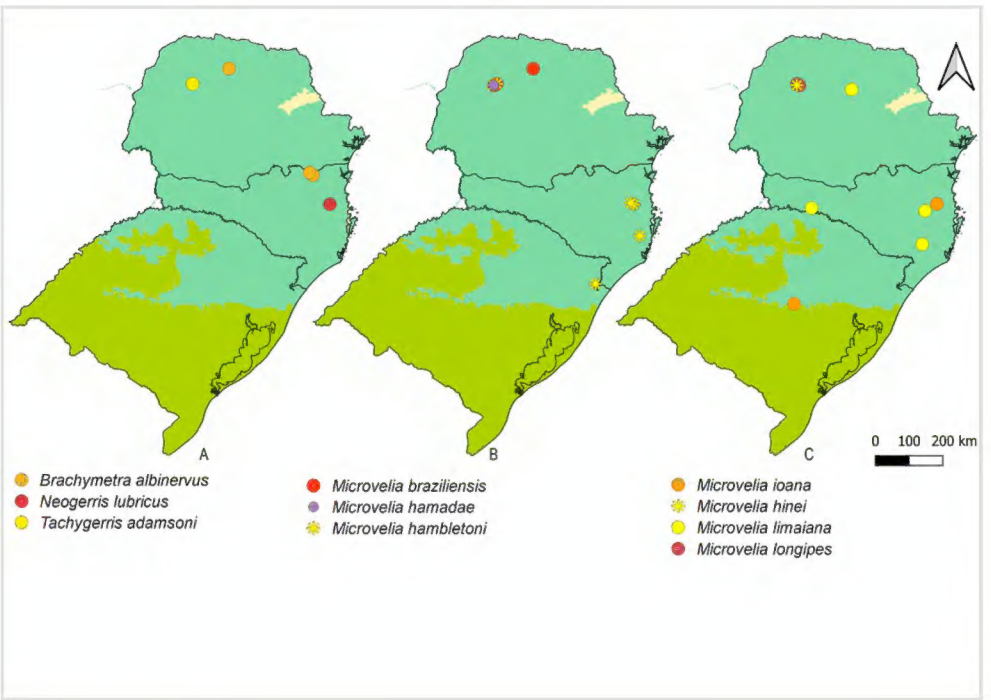

Figure 4. doi

Maps showing new records of Gerridae (*Brachymetra*, *Microvelia*, *Neogerris* and *Tachygerris*) from the South Region of Brazil.

Subfamily Gerrinae Leach, 1815

Genus *Limnogonus* Stål, 1868

Limnogonus aduncus Drake & Harris, 1933

Limnogonus aduncus subsp. *aduncus* Drake & Harris, 1933

Materials

a. taxonRank: Subspecies; genus: *Limnogonus*; specificEpithet: *aduncus*; infraspecificEpithet: *aduncus*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Limnogonus aduncus aduncus*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 94AD254F-9BA0-5390-AB80-D403197FE937

b. taxonRank: Subspecies; genus: *Limnogonus*; specificEpithet: *aduncus*; infraspecificEpithet: *aduncus*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Paraná; municipality: Paranaguá; locality: Ilha do Mel, pousada Ephira; decimalLatitude: -25.5656; decimalLongitude: -48.3153; samplingProtocol: "D" Net; year: 2016; month: X; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Limnogonus aduncus aduncus*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E900FC7C-6866-5B79-BA8A-3ECDCB2CEFE9

c. taxonRank: Subspecies; genus: *Limnogonus*; specificEpithet: *aduncus*; infraspecificEpithet: *aduncus*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Paraná; municipality: Paranaguá; locality: Ilha do Mel, pousada Ephira; decimalLatitude: -25.5656; decimalLongitude: -48.3153; samplingProtocol: "D" Net; year: 2016; month: X; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Limnogonus aduncus aduncus*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 80458F0D-B36C-5FF7-B6A2-8DBEAE5B078C

Distribution: Costa Rica, Panama, Trinidad & Tobago, Colombia, Venezuela, Guyana, Suriname, Brazil, Ecuador, Peru, Bolivia, Paraguay and Argentina.

Notes: Previously reported from Paraná and Santa Catarina by Moreira and Campos (2012)

Genus *Neogerris* Matsumura, 1913

Neogerris lubricus (White, 1879)

Material

a. taxonRank: species; genus: *Neogerris*; specificEpithet: *lubricus*; scientificNameAuthorship: (White, 1879); stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa da Sede; decimalLatitude: -27.0531; decimalLongitude: -49.0868; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Neogerris lubricus*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 465B6736-3273-5D9A-90D4-8021FC6DE546

Distribution: Costa Rica, Panama, Trinidad & Tobago, Colombia, Venezuela, Guyana, Suriname, French Guiana, Brazil, Ecuador, Peru, Bolivia, Paraguay and Argentina.

Notes: First record from Santa Catarina. Previously recorded from Rio Grande do Sul by Rodrigues et al. (2021), (Fig. 2B, Fig. 4A).

Genus *Tachygerris* Drake, 1957

Tachygerris adamsoni (Drake, 1942)

Material

a. taxonRank: species; genus: *Tachygerris*; specificEpithet: *adamsoni*; scientificNameAuthorship: (Drake, 1942); stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; verbatimElevation: 457 m; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Tachygerris adamsoni*; identifiedBy: C. F. B. Floriano;

institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E3368CD7-BEF3-57D3-8D3F-D80459279E60

Distribution: Trinidad & Tobago, Colombia, Venezuela, Suriname, French Guiana, Brazil, Peru, Bolivia, Paraguay.

Notes: First record from Paraná and the South Region of Brazil (Fig. 2C, Fig. 4A).

Subfamily Microveliinae China & Usinger, 1949

Genus *Microvelia* Westwood, 1834

Microvelia arca Drake, 1958

Materials

Holotype:

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *arca*; scientificNameAuthorship: Drake, 1958; stateProvince: Santa Catarina; municipality: Chapecó; locality: Linha facão; decimalLatitude: -27.1; decimalLongitude: -52.6; samplingProtocol: "D" Net; year: 1957; month: V; individualCount: 1; sex: macho; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia arca*; identifiedBy: C. Drake; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: 33399C42-4E3B-5C41-BD47-76D1654A45C0

Other materials:

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *arca*; scientificNameAuthorship: Drake, 1958; stateProvince: Santa Catarina; municipality: Chapecó; locality: Linha facão; decimalLatitude: -27.1; decimalLongitude: -52.6; samplingProtocol: "D" Net; year: 1956; individualCount: 3; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia arca*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 9E6B7E4F-C617-521A-99CB-A35CEB4BA6DC

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *arca*; scientificNameAuthorship: Drake, 1958; stateProvince: Santa Catarina; municipality: Chapecó; locality: Linha facão; decimalLatitude: -27.1; decimalLongitude: -52.6; samplingProtocol: "D" Net; year: 1956; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia arca*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 3E697C63-2652-5A2E-9EB8-DD9DA150B060

Distribution: Brazil.

Notes: Originally described from Santa Catarina (Drake 1958a).

Microvelia braziliensis McKinstry, 1937

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Marialva; locality: Ribeirão Sarandi, Cachoeira Marialva; decimalLatitude: -23.4423; decimalLongitude: -51.7695; samplingProtocol: "D" Net; year: 2024; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 516E493F-A831-5AD7-941D-BEB539A0E3C1

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Marialva; locality: Ribeirão Sarandi, Cachoeira Marialva; decimalLatitude: -23.4423; decimalLongitude: -51.7695; samplingProtocol: "D" Net; year: 2024; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 68975BEB-0405-5295-8A85-8B6C4ED3910A

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, brejo na trilha; decimalLatitude: -23.8883; decimalLongitude: -52.8086; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1FF508B8-4AB1-595F-89C7-D8147471E74A

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, brejo na trilha; decimalLatitude: -23.8883; decimalLongitude: -52.8086; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 7D9A11CC-8A84-5927-982B-CF686E81BBA5

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D4DBCA8C-26AA-5619-AF50-89A9321BDBC7

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E4E2650B-790A-5DB0-8BE4-5F661C41175C

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 012F5413-393E-52F4-8C0E-3DD7866D7550

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *braziliensis*; scientificNameAuthorship: McKinstry, 1937; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia braziliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C9E1EEF3-516F-5D35-871E-0E65EFD1CA47

Distribution: Brazil, Ecuador, Peru, Bolivia, Paraguay and Argentina.

Notes: First records from Paraná (Fig. 3A, Fig. 4B). Previously reported from Santa Catarina and Rio Grande do Sul by Drake and Plaumann (1955) and Rodrigues et al. (2012).

Microvelia hamadae dos Santos, Rodrigues, Couceiro & Moreira, 2021

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *hamadae*; scientificNameAuthorship: dos Santos, Rodrigues, Couceiro & Moreira, 2021; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, brejo na trilha; decimalLatitude: -23.8883; decimalLongitude: -52.8086; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 18; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hamadae*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 16F9F2AF-6EA9-5775-A7DF-86FCE6F10FA5

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *hamadae*; scientificNameAuthorship: dos Santos, Rodrigues, Couceiro & Moreira, 2021; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, brejo na trilha; decimalLatitude: -23.8883; decimalLongitude: -52.8086; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 21; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hamadae*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B70C5EDF-1153-5F95-BA7B-C357881BFE0F

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *hamadae*; scientificNameAuthorship: dos Santos, Rodrigues, Couceiro & Moreira, 2021; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hamadae*; identifiedBy: C. F. B. Floriano;

institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 291290EA-96CF-5D85-B7C3-D58FC2FB10AF

Distribution: Brazil.

Notes: First records from Paraná and the South Region of Brazil (Fig. 3B, Fig. 4B).

Microvelia hambletoni Drake, 1951

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 19; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A133A7E6-8441-507F-A4C7-5F451036E34D

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 26; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 38D5D8AE-2A70-5B0F-97A0-1659FF4616E7

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Curva do Rio Garcia; decimalLatitude: -27.0610; decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 5; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 296986AB-5C3F-515D-A97C-AA48D7736D4B

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Curva do Rio Garcia; decimalLatitude: -27.0610; decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 8; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D4EAA63A-4B4A-543D-A440-198462DF056A

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili;

decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 2D8C599D-560A-587D-BF46-1E9719ED0D37

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3779911C-9E18-5F1E-B6F9-ABC49016315B

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Broemer; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4DDFAC2A-0C09-5F23-B2CF-CA78C2B82EB6

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Broemer; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CAE79DED-3049-5F58-ABDF-C2056055DC8C

i. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CBF14CE5-AC31-5307-AE3F-62E249988CFA

j. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 19; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 8E50284F-6524-5C00-99DE-7C8AF7B68D96

k. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano;

institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6C1438D5-9C76-59F4-9714-FD44E0D4E2F1

l. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6DAFCB3A-5F58-518F-8111-1F5DEE28C11A

m. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A7609B88-5F62-5A9D-AA49-E471C78FA76A

n. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A62B9B7F-A2E1-50F2-BC55-0F66C3314E27

o. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: AE0D4C87-17B0-5CC7-8D57-C822EAA366C0

p. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 05F1D701-6012-582C-A365-3BAF55C8041E

q. taxonRank: species; genus: *Microvelia*; specificEpithet: *hambletoni*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hambletoni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6B9A0E4E-7609-5BA2-B6EE-5D5FB2B52503

Distribution: Brazil and Peru.

Notes: First records from Paraná and Rio Grande do Sul (Fig. 3C, Fig. 4B). Previously recorded from Santa Catarina (Drake 1951).

Microvelia hinei Drake, 1920

Material

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *hinei*; scientificNameAuthorship: Drake, 1920; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia hinei*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 75894A8F-1531-5366-9384-550EB4A31538

Distribution: Canada, United States, Mexico, Dominan Republic, Puerto Rico, Brazil, Peru and Argentina.

Notes: First record from Paraná and the South Region of Brazil (Fig. 3D, Fig. 4C).

Microvelia ioana Drake & Hottes, 1952

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Cachoeira da captação; decimalLatitude: -27.0545; decimalLongitude: -49.0838; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 34AED6E5-78D5-5962-9AB6-DAF8A8D917F0

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Cachoeira da captação; decimalLatitude: -27.0545; decimalLongitude: -49.0838; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 96E7F1DE-2F34-5944-91F8-B44D4A37BA9E

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Rio Grande do Sul; municipality: Candelária; locality: Botucaraí; decimalLatitude: -29.71; decimalLongitude: -52.91; samplingProtocol: "D" Net; year: 1959; month: XI; individualCount: 3; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: A6E64681-59CB-5B98-BAA3-11B56EAE0C27

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Rio Grande do Sul; municipality: Candelária; locality: Botucaraí; decimalLatitude: -29.71; decimalLongitude: -52.91; samplingProtocol: "D" Net; year: 1959; month: XI; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 01EA9F6D-FF5C-56AA-99C3-FA6F36131378

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Rio Grande do Sul; municipality: Nova Petrópolis; decimalLatitude: -29.36; decimalLongitude: -51.20; samplingProtocol: "D" Net; year: 1959; month: XI; individualCount: 5; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 50DACB63-6D16-591D-AAC6-623E61FFC289

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *ioana*; scientificNameAuthorship: Drake & Hottes, 1952; stateProvince: Rio Grande do Sul; municipality: Nova Petrópolis; decimalLatitude: -29.36; decimalLongitude: -51.20; samplingProtocol: "D" Net; year: 1959; month: XI; individualCount: 4; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia ioana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: ECC6E86B-F5DB-51E1-8205-5BCCCBB8E2AB

Distribution: Brazil.

Notes: First records from Rio Grande do Sul (Fig. 3E, Fig. 4C). Previously reported from Santa Catarina by Magalhães et al. (2021).

Microvelia limaiana Drake, 1951

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Faxinal; locality: Cachoeira do Rio São Pedro; decimalLatitude: -23.9756; decimalLongitude: -51.2247; samplingProtocol: "D" Net; year: 2020; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4A195F92-0329-5666-9CE8-E1858E10933D

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Paraná; municipality: Faxinal; locality: Cachoeira do Rio São Pedro; decimalLatitude: -23.9756; decimalLongitude: -51.2247; samplingProtocol: "D" Net; year: 2020; month: IX; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia limaiana* ; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: FDCCF3A0-22AE-583C-80FB-89CBA166917E

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Orleans; locality: Morro da Igreja; decimalLatitude: -28.1286; decimalLongitude: -49.4760; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 13; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID:

Microvelia limaiana; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 02943E73-4A66-5CEA-B731-2BFB48324C11

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Orleans; locality: Morro da Igreja; decimalLatitude: -28.1286; decimalLongitude: -49.4760; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1BBD1887-17AC-5FA4-845A-E8C11021AAB3

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia, Saltinho Bach; decimalLatitude: -27.18; decimalLongitude: -52.38; individualCount: 2; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 4E34CC98-18E3-52C8-92FD-B310DC738BE8

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia, Saltinho Bach; decimalLatitude: -27.18; decimalLongitude: -52.38; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 9E7D75F4-8065-5C62-8533-C9003A6A3653

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Concórdia; locality: Comunidade Cachimbó; verbatimElevation: 600 m; decimalLatitude: -27.16; decimalLongitude: -51.86; year: 1959; month: XII; individualCount: 1; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 72048F59-1B8A-5428-9324-C6CB6121C588

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *limaiana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Concórdia; locality: Comunidade Cachimbó; decimalLatitude: -27.16; decimalLongitude: -51.86; year: 1959; month: XII; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia limaiana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 11BD9D4D-B638-5D00-A66C-69E2900108DD

Distribution: Brazil and Argentina.

Notes: First records from Paraná (Fig. 3F, Fig. 4C). Originally described from Santa Catarina (Drake 1951).

Microvelia longipes Uhler, 1894

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *longipes*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Paranaguá; locality: Ilha do Mel, pousada Ephira; decimalLatitude: -25.5656; decimalLongitude: -48.3153; samplingProtocol: "D" Net; year: 2016; month: X; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia longipes*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 2D3154FE-4E9F-5CFF-AC23-AD37C25C6760

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *longipes*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, poça na estrada; decimalLatitude: -23.8553; decimalLongitude: -52.8114; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia longipes*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 127E87DE-A174-5911-B442-0090E8449E01

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *longipes*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, poça na estrada; decimalLatitude: -23.8983; decimalLongitude: -52.7439; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 15; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia longipes*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 858CB341-1FAA-5DF1-8AC3-3E3EC2C5F80A

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *longipes*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, poça na estrada; decimalLatitude: -23.8983; decimalLongitude: -52.7439; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 6; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia longipes*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9E7ED954-F440-5FEF-9A6B-694CFBC02C59

Distribution: Cuba, Dominican Republic, Jamaica, Puerto Rico, U. S. Virgin Islands, St. Martin, Saint Barthélemy, St. Eustatius, St. Kitts & Nevis, Aruba, Barbados, Curaçao, Bonaire, Grenada, Trinidad & Tobago, Colombia, Venezuela, Guyana, French Guiana, Brazil, Ecuador, Peru, Bolivia, Paraguay and Argentina.

Notes: First record from Paraná (Fig. 3G, Fig. 4C). Previously recorded from Santa Catarina (Drake and Plaumann 1955).

Microvelia lujanana Drake, 1951

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality:

Erechim; decimalLatitude: -27.64; decimalLongitude: -52.27; samplingProtocol: "D" Net; year: 1957; month: V; individualCount: 3; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: 90592ABF-2F82-5002-A60C-79C5BBD47180

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Erechim; decimalLatitude: -27.64; decimalLongitude: -52.27; samplingProtocol: "D" Net; year: 1957; month: V; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: 1A7A11F9-57B0-5116-AF11-5F6F3D2B5B3C

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; decimalLatitude: -29.047; decimalLongitude: -50.145; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 30128170-2821-58B4-9791-75CFEC906D07

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; decimalLatitude: -29.047; decimalLongitude: -50.145; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 37917A55-908F-5941-9406-201F3FC32951

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.18; decimalLongitude: -52.33; samplingProtocol: "D" Net; year: 1955; month: VIII; individualCount: 4; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 4C0F6AEE-EC72-5DCF-AA44-400BAFA8D8A5

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *lujanana*; scientificNameAuthorship: Drake, 1951; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.18; decimalLongitude: -52.33; samplingProtocol: "D" Net; year: 1955; month: VIII; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia lujanana*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 17F64EDB-8680-577D-B537-9F03785D45FC

Diagnosis: Apterous form. Body length 1.10–1.45 mm; general colour brown/black, with areas of frosty pubescence; pronotum very short, not extended over mesonotum; male abdominal sterna II–IV slightly depressed centrally; posterior margin of male abdominal tergum VIII straight, slightly oblique; male pygophore and proctiger slightly asymmeric, right posterolateral angle of pygophore not notched, proctiger without distinct lateral processes; parameres asymmetrical, short, left larger than right.

Distribution: Brazil and Argentina.

Notes: First records from Brazil, in the States of Santa Catarina and Rio Grande do Sul (Fig. 3H, Fig. 5A).

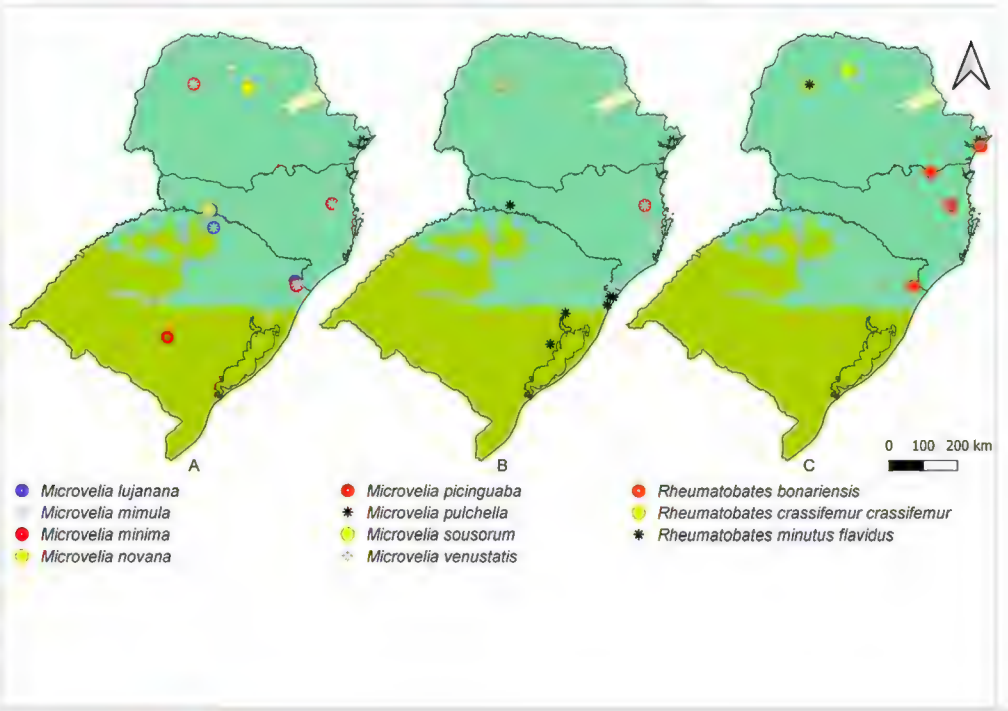

Figure 5. doi

Maps showing new records of Gerridae (*Microvelia*, *Rheumatobates*) from the South Region of Brazil.

Microvelia mimula White, 1879

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0161; decimalLongitude: -49.1665; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CE4C06DF-A687-5E7D-AD22-A665E3DEC6C5

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 87323F27-8BAE-5C5E-A346-4548B6F3C77A

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.19; decimalLongitude: -52.33; year: 1953; month: VIII; individualCount: 4; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP;

basisOfRecord: PreservedSpecimen; occurrenceID: DA107C14-2EDD-5B63-AAAC-EA23D49A6FED

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.19; decimalLongitude: -52.33; year: 1953; month: VIII; individualCount: 3; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 55EB349E-5BAC-591B-A65B-8ECAD02B3850

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Serra Geral, trilha do segredo; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 6; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 863055C1-11CE-57E7-A551-0E970C3D6E15

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Serra Geral, trilha do segredo; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 8; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9FE08A22-EE6E-5B33-A492-FF9DBBBC731E

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Serra Geral, córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C5AD8238-5F4E-513A-83FE-2E8D0AB7156F

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Serra Geral, córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 7F99E08D-CFC6-533A-9448-02A59E65D115

i. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Erechim; decimalLatitude: -27.65; decimalLongitude: -52.28; individualCount: 1; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: C51A3A91-2A4C-583B-9517-9846292AB7EE

j. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Santiago; locality: Ernesto Alves, alagado; decimalLatitude: -29.3720; decimalLongitude: -54.7448;

samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 1; sex: male; lifeStage: adult; recordedBy: J.M.S. Rodrigues, I.R.S. Cordeiro, O.M. Magalhães, E.A. Joaquim, L.N.A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5E63BCF4-86FA-5D81-A38B-7B5EE7D5928C

k. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Santiago; locality: Ernesto Alves, alagado; decimalLatitude: -29.3720; decimalLongitude: -54.7448; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 2; sex: female; lifeStage: adult; recordedBy: J. M. S. Rodrigues, I. R. S. Cordeiro, O. M. Magalhães, E. A. Joaquim, L. N. A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 24CACE02-4127-574E-9C60-A01CC47D7CD7

l. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: São Luiz Gonzaga; locality: Fazenda do Cerro, riacho; decimalLatitude: -28.2082; decimalLongitude: -54.9766; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 1; sex: male; lifeStage: adult; recordedBy: J. M. S. Rodrigues, I. R. S. Cordeiro, O. M. Magalhães, E. A. Joaquim, L. N. A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 724AB5F3-93F8-5B62-BE13-49FB8DFA3EC5

m. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: São Luiz Gonzaga; locality: Fazenda do Cerro, riacho; decimalLatitude: -28.2082; decimalLongitude: -54.9766; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 3; sex: female; lifeStage: adult; recordedBy: J. M. S. Rodrigues, I. R. S. Cordeiro, O. M. Magalhães, E. A. Joaquim, L. N. A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CB18C930-3A27-5B16-AA7C-8FF43FF1D624

n. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Santa Maria; locality: Canabarro, açude; decimalLatitude: -29.64; decimalLongitude: -54.00; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 3; sex: male; lifeStage: adult; recordedBy: J. M. S. Rodrigues, I. R. S. Cordeiro, O. M. Magalhães, E. A. Joaquim, L. N. A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9400860B-2E57-5371-96A3-8DDE76FD0C02

o. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Santa Maria; locality: Canabarro, açude; decimalLatitude: -29.64; decimalLongitude: -54.00; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 5; sex: female; lifeStage: adult; recordedBy: J. M. S. Rodrigues, I. R. S. Cordeiro, O. M. Magalhães, E. A. Joaquim, L. N. A. Sant'Ana; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 459C8090-C666-587F-8D99-1EC4EAC01124

p. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Rio Grande do Sul; municipality: Glorinha; decimalLatitude: -29.90; decimalLongitude: -50.78; individualCount: 1; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia mimula*; identifiedBy: C. F. B.

Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 1B652CBB-1C5D-57CA-A138-963F0922B087

q. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Balsa Nova; locality: São Luiz do Purumã, Rio das Pombas; decimalLatitude: -25.44024; decimalLongitude: -49.74974; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: DAF5AF9F-AC8C-535D-AD3E-93F535283028

r. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 10; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B52123D1-986C-5611-B136-3555F6090EC4

s. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 391972BF-0E8E-5736-9ABF-9B505FE952AC

t. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1863DEE0-BC0C-55A9-82AE-18453D201232

u. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C071F6C7-8E20-5EB5-9406-D84653729DD3

v. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 87E292CF-9209-5822-BD34-4C659D5BCC46

w. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8726; decimalLongitude: -52.7863; samplingProtocol: Pensilvânia; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*;

identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: DF0E4420-5872-5F69-AAD1-DCCC07CA497C

x. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8726; decimalLongitude: -52.7863; samplingProtocol: Pensilvânia; year: 2024; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 38ACDC25-C46D-5DA8-A0B4-0508258E165C

y. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Marialva; locality: Ribeirão Sarandi, Cachoeira Marialva; decimalLatitude: -23.4423; decimalLongitude: -51.7695; samplingProtocol: "D" Net; year: 2024; month: III; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 94043BC2-25EE-5B0A-A4B1-1DA5735970C6

z. taxonRank: species; genus: *Microvelia*; specificEpithet: *mimula*; scientificNameAuthorship: White, 1879; stateProvince: Paraná; municipality: Marialva; locality: Ribeirão Sarandi, Cachoeira Marialva; decimalLatitude: -23.4423; decimalLongitude: -51.7695; samplingProtocol: "D" Net; year: 2024; month: III; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia mimula*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E62737AF-1ED5-52F9-B46D-9F9547FF6326

Distribution: Cuba, Puerto Rico, Costa Rica, Panama, St. Vicent & the Grenadines, Barbados, Grenada, Trinidad & Tobago, Colombia, Venezuela, Suriname, French Guiana, Brazil, Ecuador, Peru, Paraguay, Argentina and Uruguay.

Notes: First records from Paraná (Fig. 3I, Fig. 5A). Previously reported from Santa Catarina and Rio Grande do Sul (Drake and Hussey 1951, Rodrigues et al. 2021).

Microvelia minima Drake, 1952

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 69D1539F-E34A-5F2B-ABA0-AF8AE557C230

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Aparados da Serra, Córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC;

basisOfRecord: PreservedSpecimen; occurrenceID: 05CF866F-EA5F-5064-A71F-D38176F9FEA0

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional da Aparados da Serra, Córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3EA65E23-8900-5764-8921-0A592B7C8206

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Santa Cruz do Sul; locality: Bach (brook); verbatimElevation: 200 m; decimalLatitude: -29.71; decimalLongitude: -52.43; year: 1959; month: XI; individualCount: 4; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 9F266C00-67C4-51CD-8CB4-6AA0FE64DC0E

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Santa Cruz do Sul; locality: Bach (brook); decimalLatitude: -29.71; decimalLongitude: -52.43; year: 1959; month: XI; individualCount: 6; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: A96F8B9F-1CC3-521D-85A3-748B12CCFCE8

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Caçapava do Sul; locality: Quelle (Spring); decimalLatitude: -30.50; decimalLongitude: -53.50; year: 1959; month: IX; individualCount: 4; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: A02F7BEC-0623-5101-AC32-127DC56BD3AD

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Rio Grande do Sul; municipality: Caçapava do Sul; locality: Quelle (Spring); decimalLatitude: -30.50; decimalLongitude: -53.50; year: 1959; month: IX; individualCount: 5; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: DDED9C15-7CA7-5D1B-9BFC-1EFCF2D63F74

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili, Riacho pequeno; decimalLatitude: -27.015; decimalLongitude: -49.164; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4D73FFF1-D2DB-5509-B2D4-BFC7DDC0CD7A

i. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex:

male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1DAEFB7D-D74A-5681-8126-FB858435E367

j. taxonRank: species; genus: *Microvelia*; specificEpithet: *minima*; scientificNameAuthorship: Drake, 1952; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia minima*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 22F67462-8D1D-503A-B0FA-16A006030A45

Distribution: Brazil.

Notes: First records from Paraná and Rio Grande do Sul (Fig. 5A, Fig. 6A). Described from the States of Rio de Janeiro and Santa Catarina (Drake 1952a).

Figure 6. doi

Gerridae from the South Region of Brazil, male, habitus, dorsal view. **A** *Microvelia minima*; **B** *Microvelia novana*; **C** *Microvelia picinguaba*; **D** *Microvelia pulchella*; **E** *Microvelia sousorum*; **F** *Microvelia venustatis*.

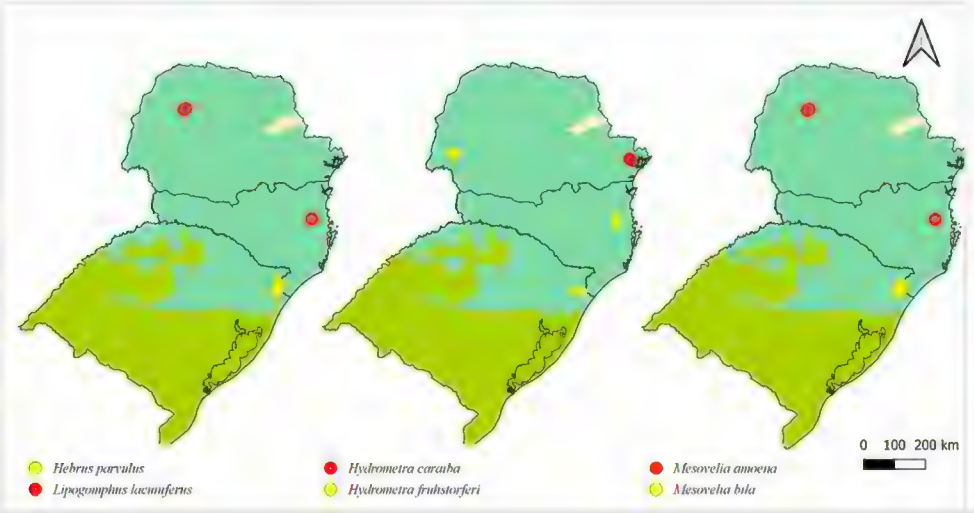

Figure 7. doi

Maps showing new records of Hebridae, Hydrometridae and Mesoveliidae from the South Region of Brazil.

Microvelia novana Drake & Plaumann, 1955

Materials

Holotype:

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *novana*; scientificNameAuthorship: Drake & Plaumann, 1955; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.19; decimalLongitude: -51.22; year: 1953; month: VIII; individualCount: 1; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia novana*; identifiedBy: C. Drake; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: 8BB9E088-B28C-530A-A2B7-E35092B5EE0F

Paratypes:

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *novana*; scientificNameAuthorship: Drake & Plaumann, 1955; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.19; decimalLongitude: -52.33; year: 1953; month: VIII; individualCount: 11; sex: male; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia novana*; identifiedBy: C. Drake; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: FB40BEDA-369A-5908-993D-3C43FDFC9F09

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *novana*; scientificNameAuthorship: Drake & Plaumann, 1955; stateProvince: Santa Catarina; municipality: Seara; locality: Nova Teutônia; decimalLatitude: -27.19; decimalLongitude: -52.33; year: 1953; month: VIII; individualCount: 8; sex: female; lifeStage: adult; recordedBy: F. Plaumann; identificationID: *Microvelia novana*; identifiedBy: C. Drake; institutionCode: NMNH; basisOfRecord: PreservedSpecimen; occurrenceID: FB95CEE1-C736-542B-8792-931321E285B4

Other material:

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *novana*; scientificNameAuthorship: Drake & Plaumann, 1955; stateProvince: Paraná; municipality: Faxinal; locality: Cachoeira do Rio São Pedro; decimalLatitude: -23.9756; decimalLongitude: -51.2247; samplingProtocol: "D" Net; year: 2020; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia novana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BC7B0EF3-D519-5C7A-A6EF-6E90B08903C2

Distribution: Brazil.

Notes: First record from Paraná (Fig. 5A, Fig. 6B). Described from Santa Catarina (Drake and Plaumann 1955).

Microvelia picinguaba Moreira & Barbosa, 2011

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *picinguaba*; scientificNameAuthorship: Moreira & Barbosa, 2011; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa trilha da curva do rio; decimalLatitude: -27.0610;

decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia picinguaba*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 37231308-198E-5259-B81A-48F251852ADF

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *picinguaba*; scientificNameAuthorship: Moreira & Barbosa, 2011; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa trilha da curva do rio; decimalLatitude: -27.0610; decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia picinguaba*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 04AB91F4-A1A4-5949-A41C-3BA66B744A5C

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *picinguaba*; scientificNameAuthorship: Moreira & Barbosa, 2011; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia picinguaba*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 307C77A8-2B52-56A2-B857-E5BDB73A1A40

Distribution: Brazil.

Notes: First records from Santa Catarina and the South Region of Brazil (Fig. 5B, Fig. 6C).

Microvelia pulchella Westwood, 1834

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 441BF355-4553-5A4B-B230-DFC1ACA870D3

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC;

basisOfRecord: PreservedSpecimen; occurrenceID: B5E57FB5-552B-5C13-8B20-0BE0EF035A07

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Santa Catarina; municipality: Chapecó; locality: Linha facão; decimalLatitude: -27.08; decimalLongitude: -52.62; year: 1957; month: V; individualCount: 1; sex: female; lifeStage: adult; recordedBy: F. Plaumman; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 33D2AF34-B2A6-58B7-95EE-3D233407FC84

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Rio Grande do Sul; municipality: Maquiné; locality: Lagoa Quadros; decimalLatitude: -29.75; decimalLongitude: -50.11; year: 1959; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: F. Plaumman; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: AEE47435-F38E-55B0-91D1-4895DCB56811

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Rio Grande do Sul; municipality: Maquiné; locality: Lagoa Quadros; decimalLatitude: -29.75; decimalLongitude: -50.11; year: 1959; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: F. Plaumman; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 7E81B6E2-77DC-535A-8BFF-517AC82F2C58

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Rio Grande do Sul; municipality: Torres; locality: Lagoa Itapeva; decimalLatitude: -29.38; decimalLongitude: -49.80; year: 1959; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: F. Plaumman; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: MZUSP; basisOfRecord: PreservedSpecimen; occurrenceID: 5D0A0687-9BDA-51EB-BB6C-87675D45CB34

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Rio Grande do Sul; municipality: Tapes; decimalLatitude: -30.70; decimalLongitude: -51.56; year: 2002; individualCount: 1; sex: male; lifeStage: adult; recordedBy: J. R. I. Ribeiro; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D89B64FE-9031-5687-A105-BC98CF26B4AE

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 8; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 04D7808E-769F-519C-9006-14002CAAFB92

i. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano;

identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: FBF8ECCF-A91C-5547-B6B5-4EDE76F722E8

j. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, poça na estrada; decimalLatitude: -23.8553; decimalLongitude: -52.8114; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 628933DF-263A-5B18-88DB-F5E2806D1D94

k. taxonRank: species; genus: *Microvelia*; specificEpithet: *pulchella*; scientificNameAuthorship: Westwood, 1834; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, poça na estrada; decimalLatitude: -23.8553; decimalLongitude: -52.8114; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 7; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia pulchella*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3D83620F-169A-552B-A464-0842E27594A4

Distribution: Canada, United States, Mexico, Guatemala, Bahamas, Cuba, Jamaica, Dominican Republic, Puerto Rico, U. S. Virgin Islands, Cayman Islands, Anguilla, St. Martin, Saba, St. Kitts & Nevis, Guadeloupe, Martinique, Costa Rica, Panama, Aruba, St. Vicent & the Grenadines, Barbados, Curaçao, Klein Curaçao, Bonaire, Klein Bonaire, Grenada, Trinidad & Tobago, Colombia, Venezuela, French Guiana, Brazil, Ecuador, Peru and Argentina.

Notes: First records from Paraná (Fig. 5B, Fig. 6D). Previously reported from Santa Catarina and Rio Grande do Sul (Drake and Plaumann 1955, Rodrigues et al. 2021).

Microvelia sousorum dos Santos, Rodrigues, Couceiro & Moreira, 2021

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *sousorum*; scientificNameAuthorship: dos Santos, Rodrigues, Couceiro & Moreira, 2021; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia sousorum*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 970D51D4-8623-5B38-BB99-FA5488213B9C

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *sousorum*; scientificNameAuthorship: dos Santos, Rodrigues, Couceiro & Moreira, 2021; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia sousorum*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E744F9B3-41BD-54B5-BE68-A3C7017DE9C1

Distribution: Brazil.

Notes: First records from Paraná and the South Region of Brazil (Fig. 5B, Fig. 6E).

Microvelia venustatis Drake & Harris, 1933

Materials

a. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa trilha da curva do rio; decimalLatitude: -27.0610; decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 39; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 073EEB49-69F1-559F-B4EC-6F3AC08FA281

b. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, lagoa trilha da curva do rio; decimalLatitude: -27.0610; decimalLongitude: -49.0951; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 6; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 30441B50-6103-5E8E-8CD4-70F5B1B5257D

c. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 14; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D8075EBC-04A0-5191-B06F-3675E30D5E09

d. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 6; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 029C2586-D67D-56A3-BC97-6BA4555ECC9A

e. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Praia Grande; locality: Parque Nacional de Aparados da Serra, Rio do Boi; decimalLatitude: -29.213; decimalLongitude: -50.005; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 8; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano;

institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5E112B3D-4DC7-5D0A-8B6A-862C74DF3CBC

f. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Praia Grande; locality: Parque Nacional de Aparados da Serra, Rio do Boi; decimalLatitude: -29.213; decimalLongitude: -50.005; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 8; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 333EB7C6-A451-5B4C-8DDC-3C85272E509D

g. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Córrego Broemer; decimalLatitude: -28.01; decimalLongitude: -49.02; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 16; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6AE1AB8E-AB94-5436-B4DD-D5A51F4D3B2D

h. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Córrego Broemer; decimalLatitude: -28.01; decimalLongitude: -49.02; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5999D80A-67C4-5E0E-BEBB-B777BBC80AA3

i. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Santo Amaro da Imperatriz; locality: Rio do Braço; decimalLatitude: -27.72; decimalLongitude: -48.72; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 8BF71B0F-FB17-5286-BE7E-CBC3E4282211

j. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Santa Catarina; municipality: Santo Amaro da Imperatriz; locality: Rio do Braço; decimalLatitude: -27.72; decimalLongitude: -48.72; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 7; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C3021690-11C1-5469-90B2-0D943E7B3FB5

k. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B4BA163F-51BB-598A-8379-20B1F5848777

l. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Paraná; municipality: Marialva; locality: Tanque de peixe; decimalLatitude: -23.528; decimalLongitude: -51.7859; samplingProtocol: "D" Net; year: 2024; month: VI; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia venustatis* ; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B7F801FF-7B5B-5EA4-A368-7AA04A25B63A

m. taxonRank: species; genus: *Microvelia*; specificEpithet: *venustatis*; scientificNameAuthorship: Drake & Harris, 1933; stateProvince: Paraná; municipality: Marialva; locality: Tanque de peixe; decimalLatitude: -23.528; decimalLongitude: -51.7859; samplingProtocol: "D" Net; year: 2024; month: VI; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Microvelia venustatis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 66DE73F4-02A9-5FF6-BC73-FC53AA0A7770

Distribution: Colombia, Brazil, Peru, Paraguay and Argentina.

Notes: First records from Paraná (Fig. 5B, Fig. 6F). Previously reported from Santa Catarina (Drake and Plaumann 1955).

Subfamily Rhagadotarsinae Lundblad, 1933

Genus *Rheumatobates* Bergroth, 1892

Rheumatobates bonariensis (Berg, 1898)

Materials

a. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Santa Catarina; municipality: Mafra; locality: Rio Negro; verbatimElevation: 790 m; decimalLatitude: -26.2117; decimalLongitude: -49.6286; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 3; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1EDD8E84-18E0-5FCD-9D39-FB5AD2110ECE

b. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Santa Catarina; municipality: Mafra; locality: Rio Negro; verbatimElevation: 790 m; decimalLatitude: -26.2117; decimalLongitude: -49.6286; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 6; sex: female; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 92DF732E-DCAD-59B2-9A86-4D137CDEBFD4

c. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 5; sex:

male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 8BE5F390-717B-5BFE-B0BC-C65B84A937B7

d. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9A55A25B-EBE6-5188-87D6-94D5B06B3450

e. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Paraná; municipality: Paranaguá; locality: Ilha do Mel, richo próximo ao forte; decimalLatitude: -25.5123; decimalLongitude: -48.3171; samplingProtocol: "D" Net; year: 2016; month: VI; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1CEE4684-36AB-54A4-8397-E381BD935204

f. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *bonariensis*; scientificNameAuthorship: (Berg, 1898); stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -49.02; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rheumatobates bonariensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A9AB3F2A-8AD7-5C70-9D02-94050188C826

Distribution: Brazil, Peru, Bolivia, Paraguay, Argentina and Uruguay.

Notes: First record from Paraná (Fig. 5C, Fig. 8A). Previously reported from Santa Catarina and Rio Grande do Sul (Hungerford 1954, Neri et al. 2005, Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul 2014, Rodrigues et al. 2021).

Rheumatobates crassifemur Esaki, 1926

Rheumatobates crassifemur subsp. *crassifemur* Esaki, 1926

Materials

a. taxonRank: Subspecies; genus: *Rheumatobates*; specificEpithet: *crassifemur*; infraspecificEpithet: *crassifemur*; scientificNameAuthorship: Esaki, 1926; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; verbatimElevation: 422 m; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates crassifemur*

crassifemur; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 774B2E06-CA4C-5129-820A-4E8204F1C2E9

b. taxonRank: Subspecies; genus: *Rheumatobates*; specificEpithet: *crassifemur*; infraspecificEpithet: *crassifemur*; scientificNameAuthorship: Esaki, 1926; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; verbatimElevation: 422 m; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates crassifemur crassifemur*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C86E98D7-E9E0-529D-8829-68F2EA14B737

c. taxonRank: Subspecies; genus: *Rheumatobates*; specificEpithet: *crassifemur*; infraspecificEpithet: *crassifemur*; scientificNameAuthorship: Esaki, 1926; stateProvince: Paraná; municipality: Marialva; locality: Tanque de peixe; decimalLatitude: -23.528; decimalLongitude: -51.785; samplingProtocol: "D" Net; year: 2024; month: VI; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates crassifemur crassifemur*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 90078FB8-B019-5422-B2C8-AEC7E3F50D7E

d. taxonRank: Subspecies; genus: *Rheumatobates*; specificEpithet: *crassifemur*; infraspecificEpithet: *crassifemur*; scientificNameAuthorship: Esaki, 1926; stateProvince: Paraná; municipality: Marialva; locality: Tanque de peixe; decimalLatitude: -23.528; decimalLongitude: -51.785; samplingProtocol: "D" Net; year: 2024; month: VI; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates crassifemur crassifemur*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 908CE8E5-AE3B-5853-A07C-441568DEABF5

Distribution: Panama, Colombia, Brazil, Bolivia, Paraguay and Argentina.

Notes: First records from Paraná (Fig. 5C, Fig. 8B). Previously reported from Rio Grande do Sul (Rodrigues et al. 2021).

Rheumatobates minutus Hungerford, 1936

Rheumatobates minutus subsp. *flavidus* Drake & Harris, 1942

Material

a. taxonRank: species; genus: *Rheumatobates*; specificEpithet: *minutus*; infraspecificEpithet: *flavidus*; scientificNameAuthorship: Drake & Harris, 1942; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rheumatobates minutus flavidus*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C883F1A0-9AAA-51D5-99F2-FF3E089FA785

Distribution: Costa Rica, Panama, Colombia, Brazil, Peru, Bolivia and Argentina.

Notes: First record from Paraná and the South Region of Brazil (Fig. 5C, Fig. 8C).

Figure 8. doi

Gerridae, Hebridae and Hydrometridae from the South Region of Brazil, male, habitus. **A–E**: Dorsal View. **F**: Ventral view. **A** *Rheumatobates bonariensis*; **B** *Rheumatobates crassifemur*; **C** *Rheumatobates minutus flavidus*; **D** *Hebrus parvulus*; **E**, **F** *Hydrometra fruhstorferi*.

Subfamily Trepobatinae Matsuda, 1960

Genus *Halobatopsis* Bianchi, 1896

Halobatopsis platensis (Berg, 1879)

Materials

a. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Morretes; locality: Rio Nhudiaquara; decimalLatitude: -25.483; decimalLongitude: -48.820; samplingProtocol: "D" Net; year: 2017; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Halobatopsis platensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 58B051FA-DBB6-543F-BE51-B06F90813830

b. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Morretes; locality: Rio Nhudiaquara; decimalLatitude: -25.483; decimalLongitude: -48.820; samplingProtocol: "D" Net; year: 2017; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Halobatopsis platensis*;

identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E3069E1E-D6D4-5FB4-A022-E2006D2DFBC5

c. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Jaguariaíva; locality: Rio Diamante; verbatimElevation: 1127 m; decimalLatitude: -24.3589; decimalLongitude: -49.8126; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 1; sex: male; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L. P. Pereira; identificationID: *Halobatopsis platensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 79C4F1D8-D716-5EE3-89C3-96A9AF8CF481

d. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Jaguariaíva; locality: Rio Diamante; verbatimElevation: 1127 m; decimalLatitude: -24.3589; decimalLongitude: -49.8126; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 2; sex: female; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L.P. Pereira; identificationID: *Halobatopsis platensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1B5C9808-1039-5BB9-9AD6-7C65C6EAA3BA

e. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Ponta Grossa; locality: Rio Pintagui; verbatimElevation: 850 m; decimalLatitude: -25.0297; decimalLongitude: -50.1008; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 2; sex: male; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L.P. Pereira; identificationID: *Halobatopsis platensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B43D0868-A4A9-574E-A229-C5904CE3221E

f. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *platensis*; scientificNameAuthorship: (Berg, 1879); stateProvince: Paraná; municipality: Ponta Grossa; locality: Rio Pintagui; verbatimElevation: 850 m; decimalLatitude: -25.0297; decimalLongitude: -50.1008; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 2; sex: female; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L. P. Pereira; identificationID: *Halobatopsis platensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 09D14238-22E3-556E-A0DB-457E5F9EC335

Distribution: Brazil, Peru, Paraguay, Argentina and Uruguay.

Notes: Previously reported from Paraná and Rio Grande do Sul (Nieser 1970, Moreira and Campos 2012, Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul 2014, Rodrigues et al. 2021).

Halobatopsis spiniventris Drake & Harris, 1936

Materials

a. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex:

male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 46CBA14E-2BA1-5D9E-9B3E-DD4FBB949B68

b. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: FD521ADB-D1E1-5423-B88E-1A24C4820362

c. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: Mafra; decimalLatitude: -26.2127; decimalLongitude: -49.6252; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 3; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 728A99CD-D845-5DA7-AD4A-72EFFE567EDB

d. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: Mafra; decimalLatitude: -26.2127; decimalLongitude: -49.6252; samplingProtocol: "D" Net; year: 2019; month: XI; individualCount: 2; sex: female; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5B95E444-49B6-5D9C-9A5C-E3479B877DF0

e. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Capivari; decimalLatitude: -28.01; decimalLongitude: -49.02; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BCEABE53-3F04-5F3A-98FC-D7439C8671D0

f. taxonRank: species; genus: *Halobatopsis*; specificEpithet: *spiniventris*; scientificNameAuthorship: Drake & Harris, 1936; stateProvince: Santa Catarina; municipality: Rancho Queimado; locality: Rio das Antas; decimalLatitude: -27.67; decimalLongitude: -49.01; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Halobatopsis spiniventris*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CE4D025F-543D-5147-812E-B5CED3687537

Distribution: Brazil, Paraguay and Argentina.

Notes: Previously reported from Paraná, Santa Catarina and Rio Grande do Sul (Nieser and Melo 1999, Moreira and Campos 2012, Cordeiro and Moreira 2015, Rodrigues et al. 2021).

Genus *Metrobates* Uhler, 1871

Metrobates plaumanni subsp. *plaumanni* Hungerford, 1951

Materials

a. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Paraná; municipality: Morretes; locality: Rio Nhudiaquara; decimalLatitude: -25.483; decimalLongitude: -48.820; samplingProtocol: "D" Net; year: 2017; month: IX; individualCount: 18; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4FE941C4-41DA-5743-BCC3-8E2E1667A8D5

b. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Paraná; municipality: Morretes; locality: Rio Nhudiaquara; decimalLatitude: -25.483; decimalLongitude: -48.820; samplingProtocol: "D" Net; year: 2017; month: IX; individualCount: 9; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E064DF73-D90D-5A51-A9D6-6E75C73DC5FB

c. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A049C4E1-1F12-590D-8632-6B7510807CC8

d. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C30CACAD-6DB0-5E70-ADDA-B7F8C55B1C84

e. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Mafra; locality: Rio Negro; decimalLatitude: -26.2117; decimalLongitude: -49.6286; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 15; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 073BB72C-A507-5FC5-80BD-D471C2017EA4

f. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Mafra; locality: Rio Negro; decimalLatitude: -26.2117; decimalLongitude: -49.6286; samplingProtocol: "D" Net; year: 2020; month: III;

individualCount: 18; sex: female; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1FED1D1E-6FCC-5D48-809C-117B5BD9CA57

g. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Rio do Bugres; decimalLatitude: -26.2769; decimalLongitude: -49.5344; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 3; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 76770918-C82A-5D25-B4F0-348EAF645CFE

h. taxonRank: subspecies; genus: *Metrobates*; specificEpithet: *plaumanni*; infraspecificEpithet: *plaumanni*; scientificNameAuthorship: Hungerford, 1951; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Rio do Bugres; decimalLatitude: -26.2769; decimalLongitude: -49.5344; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 2; sex: female; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Metrobates plaumanni*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3F275DE1-BC73-52E3-9176-75B9FAD0B402

Distribution: Brazil, Argentina and Uruguay.

Notes: Previoulsy reported from Paraná and Santa Catarina (Hungerford 1951, Armisén et al. 2022).

Family Hebridae Amyot & Serville, 1843

Subfamily Hebrinae Amyot & Serville, 1843

Genus *Hebrus* Curtis, 1833

Hebrus parvulus Stål, 1860

Material

a. taxonRank: species; genus: *Hebrus*; specificEpithet: *parvulus*; scientificNameAuthorship: Stål, 1860; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Moll; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Hebrus parvulus*; identifiedBy: C. L. FRANCO; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D6D38ACB-AFB7-5121-B768-CF7FB46181E8

Distribution: Brazil.

Notes: First record from Santa Catarina and the South Region of Brazil (Fig. 7A, Fig. 8 D).

Genus *Lipogomphus* Berg, 1879

Lipogomphus lacuniferus Berg, 1879

Material

a. taxonRank: species; genus: *Lipogomphus*; specificEpithet: *lacuniferus*; scientificNameAuthorship: Berg, 1879; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Lipogomphus lacuniferus*; identifiedBy: C. L. FRANCO; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B78FCEAC-6ACD-5CCD-AC25-4215CE2434F7

Distribution: Brazil, Bolivia, Paraguay, Argentina and Uruguay.

Notes: First record from Santa Catarina and the South Region of Brazil (Fig. 7A).

Family Hydrometridae Billberg, 1820

Subfamily Hydrometrinae Billberg, 1820

Genus *Hydrometra* Latreille, 1797

Hydrometra argentina Berg, 1879

Materials

a. taxonRank: species; genus: *Hydrometra*; specificEpithet: *argentina*; scientificNameAuthorship: Berg, 1879; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Hydrometra argentina*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A9356B64-3A24-5B4C-BDBC-D11016DADDD4

b. taxonRank: species; genus: *Hydrometra*; specificEpithet: *argentina*; scientificNameAuthorship: Berg, 1879; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Hydrometra argentina*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: AD347EB4-5E2B-5F29-BBF2-57BDCC577267

c. taxonRank: species; genus: *Hydrometra*; specificEpithet: *argentina*; scientificNameAuthorship: Berg, 1879; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Hydrometra argentina*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: F9509CE4-C871-544D-962E-E8F06DA075E9

d. taxonRank: species; genus: *Hydrometra*; specificEpithet: *argentina*; scientificNameAuthorship: Berg, 1879; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, lagoa no caminho para o canion Fortaleza; decimalLatitude: -29.177; decimalLongitude: -50.098; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Hydrometra argentina*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 39F92817-EBE6-5865-AE53-509966D32BB4

e. taxonRank: species; genus: *Hydrometra*; specificEpithet: *argentina*; scientificNameAuthorship: Berg, 1879; stateProvince: Paraná; municipality: Curitiba; locality: Lagoa do Jardim Botânico; decimalLatitude: -25.441; decimalLongitude: -49.240; samplingProtocol: "D" Net; year: 2016; month: XI; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Hydrometra argentina*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 17502F51-9099-5F25-98FD-3451E14AE4EF

Distribution: Panama, Trinidad & Tobago, Colombia, Venezuela, Suriname, Brazil, Ecuador, Peru, Bolivia, Chile, Paraguay, Argentina and Uruguay.

Notes: Previoulsy reported from Paraná, Santa Catarina and Rio Grande do Sul (Jaczewski 1928a, Neri et al. 2005, University of California, Berkeley 2009, Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul 2014, Rodrigues et al. 2021).

Hydrometra caraiba Guérin-Méneville, 1856

Materials

a. taxonRank: species; genus: *Hydrometra*; specificEpithet: *caraiba*; scientificNameAuthorship: Guérin-Méneville, 1856; stateProvince: Paraná; municipality: Antonina; locality: Reserva Natural da Guaricica; decimalLatitude: -25.3160; decimalLongitude: -48.6960; year: 2017; month: X; individualCount: 1; sex: male; lifeStage: adult; recordedBy: A. C. Domahovski; identificationID: *Hydrometra caraiba*; identifiedBy: I. R. S. Cordeiro; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: CDD2778C-0F36-5122-82D9-820D9C48BF5C

b. taxonRank: species; genus: *Hydrometra*; specificEpithet: *caraiba*; scientificNameAuthorship: Guérin-Méneville, 1856; stateProvince: Paraná; municipality: Antonina; locality: Reserva Natural da Guaricica; decimalLatitude: -25.3160; decimalLongitude: -48.6960; year: 2017; month: X; individualCount: 3; sex: female; lifeStage: adult; recordedBy: A. C. Domahovski; identificationID: *Hydrometra caraiba*;

identifiedBy: I. R. S. Cordeiro; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: A6E626BD-82D9-5B37-AEF9-AC439981CC6B

Distribution: Mexico, Guatemala, Cuba, Haiti, Jamaica, Puerto Rico, Guadeloupe, Martinique, Honduras, Nicaragua, El Salvador, Costa Rica, Panama, Trinidad & Tobago, Colombia, Venezuela, Guyana, French Guiana, Brazil, Ecuador and Peru.

Notes: First records for Paraná and the South Region of Brazil (Fig. 7B).

Hydrometra fruhstorferi Hungerford & Evans, 1934

Materials

a. taxonRank: species; genus: *Hydrometra*; specificEpithet: *fruhstorferi*; scientificNameAuthorship: Hungerford & Evans, 1934; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Hydrometra fruhstorferi*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 0D3091F3-BC60-57E6-B679-AF604587EAED

b. taxonRank: species; genus: *Hydrometra*; specificEpithet: *fruhstorferi*; scientificNameAuthorship: Hungerford & Evans, 1934; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Hydrometra fruhstorferi*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6D1DF00D-A13B-5E20-9825-F8C79EE5DAD3

c. taxonRank: species; genus: *Hydrometra*; specificEpithet: *fruhstorferi*; scientificNameAuthorship: Hungerford & Evans, 1934; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Hydrometra fruhstorferi*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A1C53641-1827-5C63-B15F-6B715B514555

Distribution: Brazil, Bolivia, Paraguay and Argentina.

Notes: First record from Rio Grande do Sul (Fig. 8D-E, Fig. 7B). Previously reported from Paraná and Santa Catarina (Drake 1952b, Cordeiro and Moreira 2015).

Family Mesoveliidae Douglas & Scott, 1867

Subfamily Mesoveliinae Douglas & Scott, 1867

Genus *Mesovelia* Mulsant & Rey, 1852

Mesovelia amoena Uhler, 1894

Materials

a. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili, Riacho pequeno; decimalLatitude: -27.015; decimalLongitude: -49.164; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Mesovelia amoena*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4DE7C545-7F04-57A7-B73C-5D6724A89D86

b. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 6; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Mesovelia amoena*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BEE63079-052E-5F0A-8DBC-0B9C6E95775B

c. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Mesovelia amoena*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 97DB6BE0-83CA-5B80-88BA-0E45E65AAEC0

d. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Mesovelia amoena*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5DD2D198-508A-55D1-BDAE-0CA24952D684

e. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV;

individualCount: 7; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Mesovelia amoena*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1F524C1F-32F7-5D0D-9AAC-AD0453C35704

f. taxonRank: species; genus: *Mesovelia*; specificEpithet: *amoena*; scientificNameAuthorship: Uhler, 1894; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Mesovelia amoena*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 91704A63-8143-59C0-94CB-477F5AAB8A98

Diagnosis: Apterous form. Body length 2.00 mm; male mesofemur without row of spinules on posterior margin; male abdominal sterna VII and VIII without spines or clusters of black spinules; male abdominal segment VIII without lateral tubercles, posterior margin rounded dorsally, concave ventrally; paramere with margins converging distally, apex not bifid.

Distribution: Hawaiian Islands, Galápagos Islands, Canada, United States, Mexico, Belize, Cuba, Jamaica, Dominican Republic, Puerto Rico, U.S. Virgin Islands, St. Eustatius, Martinique, Costa Rica, Panama, St. Vicent & the Grenadines, Curaçao, Bonaire, Trinidad & Tobago, Colombia, French Guiana, Brazil and Argentina.

Notes: First records from Santa Catarina (Fig. 7C, Fig. 9A-F). Previously reported from Paraná (Jaczewski 1928b). Males of this species are extremely rare in the Neotropics.

Figure 9. doi

Mesoveliidae from the South Region of Brazil. **A–F.** *Mesovelia amoena*. **G–I.** *Mesovelia bila*, male. **A–D.** Male; **A** Habitus, dorsal view; **B** Habitus, ventral view; **C** Abdomen, ventral view; **D** Genital capsule, lateral view; **E, F.** Female; **E** Habitus, dorsal view; **F** Habitus, ventral view; **G** Habitus, dorsal view; **H** Habitus, ventral view; **I** Abdomen, ventral view.

Mesovelia bila Jaczewski, 1928

Materials

a. taxonRank: species; genus: *Mesovelia*; specificEpithet: *bila*; scientificNameAuthorship: Jaczewski, 1928; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Marcel; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Mesovelia bila*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D1733CFD-DE8E-51C3-997C-03459C33736C

b. taxonRank: species; genus: *Mesovelia*; specificEpithet: *bila*; scientificNameAuthorship: Jaczewski, 1928; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Higropétrico; decimalLatitude: -28.953; decimalLongitude: -50.056; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Mesovelia bila*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A44F64AD-79E6-5178-83EF-DB3699BB48A0

c. taxonRank: species; genus: *Mesovelia*; specificEpithet: *bila*; scientificNameAuthorship: Jaczewski, 1928; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Higropétrico; verbatimElevation: 880 m; decimalLatitude: -28.953; decimalLongitude: -50.056; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Mesovelia bila*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CC7289FA-E170-5FA4-A31F-944A8358164B

Distribution: Brazil and Argentina.

Notes: First records from Rio Grande do Sul (Fig. 7C, Fig. 9G-I). Previously reported from Paraná and Santa Catarina (Jaczewski 1928b, Floriano et al. 2017).

Family Veliidae Brullé, 1836

Subfamily Rhagoveliinae China & Usinger, 1949

Genus *Rhagovelia* Mayr, 1865

Rhagovelia brunae Magalhães & Moreira, 2016

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *brunae*; scientificNameAuthorship: Magalhães & Moreira, 2016; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B.

Floriano; identificationID: *Rhagovelia brunae*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9483FEF7-282D-50F5-9495-299966019EF1

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *brunae*; scientificNameAuthorship: Magalhães & Moreira, 2016; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 9; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia brunae*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 77F4B545-29FE-5AB4-9B3B-EFAD23914216

Distribution: Venezuela, French Guiana and Brazil.

Notes: First records from Paraná and the South Region of Brazil (Fig. 10A, Fig. 11C).

Figure 10. doi

Veliidae from the South Region of Brazil, habitus, dorsal view. **A–D, F** Male. **E.** Female. **A** *Rhagovelia brunae*; **B** *Rhagovelia henryi*; **C** *Rhagovelia occulcata*; **D**, **E** *Rhagovelia ochroischion*; **F** *Rhagovelia robusta*.

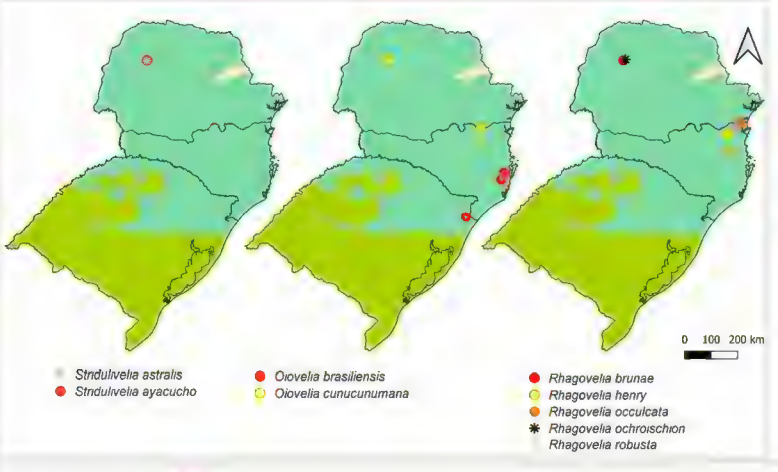

Figure 11. doi

Maps showing new records of Veliidae (*Stridulivelia*, *Oiovelia* and *Rhagovelia*) from the South Region of Brazil.

Rhagovelia henryi Polhemus, 1997

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 18; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BD7A5913-8E9E-5753-9DE0-8BABC4D5B6C5

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158; decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 23; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C4E9DCD0-4182-5680-AE78-009B6F4FA962

c. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; locality: Parque Nacional da Serra do Itajaí, KM 18; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 27; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CB1974C0-BB28-5C9F-A496-C780A7F36103

d. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; locality: Parque Nacional da Serra do Itajaí, KM 18; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 35; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E57BD4FC-A224-59F9-894A-8DDA781DD282

e. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili, rampa; decimalLatitude: -27.0155; decimalLongitude: -49.1655; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 6; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BC4623C1-F71A-51D2-B43B-E11DD14F6CD3

f. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili, rampa; decimalLatitude: -27.0155; decimalLongitude: -49.1655; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 48B970C5-5698-5E98-B7E6-C6D113E96413

g. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D"

Net; year: 2017; month: IV; individualCount: 9; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4FDD5F03-B9A0-5A9A-8352-81D3D222CDE2

h. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 10; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia* henry; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 40FE7521-9A33-52D8-8749-03FDCC32DADB

i. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Cachoeira da captação; decimalLatitude: -27.0545; decimalLongitude: -49.0838; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 41; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 79398D76-7A4C-58F6-B8A1-FB2E27B8782B

j. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Cachoeira da captação; decimalLatitude: -27.0545; decimalLongitude: -49.0838; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 26; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 73F4393E-202E-54E3-B237-F9259C3C47BD

k. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 03A94530-A881-5DA5-BA17-5FAB3AFCC71B

l. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: A6F90AC4-F42A-50C3-8256-72C0D33D3DB9

m. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Corupá; locality: Rio Cachoeira; decimalLatitude: -26.425; decimalLongitude: -49.255; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia henryi*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 83C51755-29E0-5574-99FC-9E67E0E22D8C

n. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Corupá; locality: Rio Cachoeira; decimalLatitude: -26.425; decimalLongitude: -49.255; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia* henry; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: DFFBD604-F5AE-5E6E-AD97-B8AFC31D3568

o. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Fazenda Evaristo Riacho Cachoeira do Índio; decimalLatitude: -26.3058; decimalLongitude: -49.5269; samplingProtocol: "D" Net; year: 2021; month: I; individualCount: 2; sex: male; lifeStage: adult; recordedBy: T. Polizei & Família Roell; identificationID: *Rhagovelia* henry; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 2919F308-E945-5DF0-AD4F-F36E0FB5A935

p. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *henryi*; scientificNameAuthorship: Polhemus, 1997; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Fazenda Evaristo Riacho Cachoeira do Índio; decimalLatitude: -26.3058; decimalLongitude: -49.5269; samplingProtocol: "D" Net; year: 2021; month: I; individualCount: 3; sex: female; lifeStage: adult; recordedBy: T. Polizei & Família Roell; identificationID: *Rhagovelia* henry; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B7FA6E36-9816-5028-9D29-703241317B82

Distribution: Brazil.

Notes: First records from Santa Catarina and the South Region of Brazil (Fig. 10B, Fig. 11C).

Rhagovelia lucida Gould, 1931

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Rio Garcia; decimalLatitude: -27.0538; decimalLongitude: -49.0863; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: FC76CC9D-77A3-5980-8EA0-27E6AD9BDAB7

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; locality: Parque Nacional da Serra do Itajaí, KM 18; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B42A64A1-9D55-5BB6-820E-D9DE8BED511D

c. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Indaial; locality: Parque Nacional da Serra do Itajaí, Pesque Pague do Wili; decimalLatitude: -27.0158;

decimalLongitude: -49.1660; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: EEC7ED80-97C0-5929-BFA4-BCAE14CB4166

d. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 33; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C93BF422-377E-545F-B302-F71EE9B5AA50

e. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B57A9679-C1C5-5FD0-A913-29C9659FC7C4

f. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 12; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: EAF73B3E-4670-54A5-8F22-52612C377187

g. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 3; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: CD05A20D-9287-53FE-8586-D46A4E5F267F

h. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Rancho Queimado; locality: Rio das Antas; decimalLatitude: -27.673; decimalLongitude: -49.012; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 66; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 47D6277A-7FD7-5C40-8303-335B72A4368D

i. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Rancho Queimado; locality: Rio das Antas; decimalLatitude: -27.673; decimalLongitude: -49.012; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 37; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E4246160-804E-54AE-8884-78747A5793D0

j. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Rancho Queimado; locality: Rio Cubatão; decimalLatitude: -27.673; decimalLongitude: -49.012; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 86D0B84D-1D51-51FE-90D5-A31BE6307125

k. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Rancho Queimado; locality: Rio Cubatão; decimalLatitude: -27.673; decimalLongitude: -49.012; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: EAA0409A-DD52-5B29-B846-1FDFFB6F95CF

l. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Trilha do Cedro; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BEB6B9FF-348C-5A1D-9546-2AFE2B72B15F

m. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Atafora; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 1BADAA05-B62C-577A-B9ED-81D9185BDB06

n. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Atafora; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 4; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 95B7D188-E237-5907-BB62-CC4E8E84C118

o. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Ferro; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 5; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4EA0E2FD-9FFF-5BD6-AE2F-51C61BEFCAD9

p. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Ferro; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 6; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 786D6CEF-D818-58F1-9B74-D5076DE5576C

q. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Moll; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 7; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3CE4D6F9-8ABF-55E1-9C44-38B2EED7BEBB

r. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Rio Moll; decimalLatitude: -27.89; decimalLongitude: -48.92; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 13; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E7666F41-FDC5-5C69-AFD5-962F5DC51940

s. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Riacho Dona Terezinha, Montanha; decimalLatitude: -27.9088; decimalLongitude: -48.9126; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 9; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 00151E5F-05F4-5B46-A936-8BDF8CA3DD7D

t. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Riacho Dona Terezinha, Montanha; decimalLatitude: -27.9088; decimalLongitude: -48.9126; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 15; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 94261684-61E4-5A5E-8C1B-A02427963F7C

u. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Águas Mornas; locality: Rio Braço da Forquilha; decimalLatitude: -27.694; decimalLongitude: -48.825; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4FB2846C-4C00-567E-8AE2-FB8D771246B4

v. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Corupá; locality: Cachoeira da antiga usina; decimalLatitude: -26.389; decimalLongitude: -49.222; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 10; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: F43A0B33-21C3-5FC6-9B64-D9C8DC08E247

w. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: Corupá; locality: Cachoeira da antiga usina; decimalLatitude: -26.389; decimalLongitude: -49.222; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 876420CF-EE6D-5A07-9F53-D00ABE72DA82

x. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Santa Catarina; municipality: São Bento do Sul; locality: Serra do Corupá, Rio Estrada Galinhas; decimalLatitude: -26.3494; decimalLongitude: -49.3317; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 12; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D20CEDB5-5431-563F-A37F-BD3B5D0DB54E

y. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Afluente do rio Brumado; decimalLatitude: -25.500; decimalLongitude: -48.866; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 01D5CF19-9663-5463-901B-EA9757BB61AA

z. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Afluente do rio Brumado; decimalLatitude: -25.500; decimalLongitude: -48.866; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3B1107CE-A2A5-57E0-97A0-DB7C1B719A8E

aa. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Serra da Graciosa, Rio Curva da Ferradura; decimalLatitude: -25.3594; decimalLongitude: -48.8853; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C47B3897-C620-50B6-A512-35943E767C21

ab. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Serra da Graciosa, Rio Curva da Ferradura; decimalLatitude: -25.3594; decimalLongitude: -48.8853; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 235A2DC7-8E41-5055-A19D-54DECAA99786

ac. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Rio Burrado; decimalLatitude: -25.5069; decimalLongitude: -48.8853; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 416D01D5-DFA2-5171-B0C8-3FD8E4897A11

ad. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Rio Burrado; decimalLatitude: -25.5069; decimalLongitude: -48.8853; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: BB767742-B25E-57D3-8B78-0129D3629A5B

ae. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Balsa Nova; locality: São Luiz do Purumã, Rio das Pombas; decimalLatitude: -25.44024; decimalLongitude: -49.74974; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 0EF8FDA6-56D5-518A-B5A1-D686871C6CC1

af. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Riacho Iapó; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 9; sex: male; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 5FBDCDF5-3E12-52F5-ACB2-09FB95EF80EB

ag. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Riacho Iapó; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 3; sex: female; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 2424ABB6-4EF7-5E9B-A22E-CAF69CCC8CFE

ah. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Rio Mãe Catira; decimalLatitude: -25.350000; decimalLongitude: -48.866667; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 4; sex: female; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 744CEEE5-724C-53EE-B319-DC7F7044D667

ai. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Morretes; locality: Rio Mãe Catira; decimalLatitude: -25.350000; decimalLongitude: -48.866667; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 5; sex: male; lifeStage: adult; recordedBy: T. Polizei & B. Araujo; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: E664605E-4A81-5369-9929-7CCD8D7D948B

aj. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Quatro Barras; locality: Rio Taquari; decimalLatitude: -25.3464; decimalLongitude: -48.9319; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 100; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 37A4BA7C-051A-56B8-8427-5B54481D24A0

ak. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *lucida*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Quatro Barras; locality: Rio Taquari; decimalLatitude: -25.3464; decimalLongitude: -48.9319; samplingProtocol: "D" Net; year: 2020; month: IV; individualCount: 93; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia lucida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: D2290489-BEF6-5D50-AEBC-129FA6677187

Distribution: Brazil and Argentina.

Notes: Previously reported from Paraná, Santa Catarina and Rio Grande do Sul (Bacon 1956, Polhemus 1997, Moreira and Campos 2012, Cordeiro and Moreira 2015).

Rhagovelia occulcata Drake, 1959

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *occulcata*; scientificNameAuthorship: Drake, 1959; stateProvince: Santa Catarina; municipality: Garuva; locality: Rio São João; decimalLatitude: -26.0054; decimalLongitude: -48.8567; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 26; sex: male; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L. P. Pereira; identificationID: *Rhagovelia occulcata*; identifiedBy: N. O. Paiva; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 19AD677B-A98E-5522-B8A9-B3F09334F7B0

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *occulcata*; scientificNameAuthorship: Drake, 1959; stateProvince: Santa Catarina; municipality: Garuva; locality: Rio São João; decimalLatitude: -26.0054; decimalLongitude: -48.8567; samplingProtocol: "D" Net; year: 2023; month: X; individualCount: 13; sex: female; lifeStage: adult; recordedBy: R. P. R. Canejo, J. M. S. Rodrigues, M. S. L. Alexandre, L. P. Pereira; identificationID: *Rhagovelia occulcata*; identifiedBy: N. O. Paiva; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 9417E27A-82CB-570C-B97C-B1F2A1C0E5BF

Distribution: Brazil.

Notes: First records from Santa Catarina (Fig. 10C, Fig. 11C). Described from Paraná (Drake 1959).

Rhagovelia ochroischion Nieser & Melo, 1997

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *ochroischion*; scientificNameAuthorship: Nieser & Melo, 1997; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 5; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia ochroischion*; identifiedBy: N. O. Paiva; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: EDEA14F9-0D26-5232-8A4C-22561F2A6E3F

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *ochroischion*; scientificNameAuthorship: Nieser & Melo, 1997; stateProvince: Paraná; municipality: Cianorte; locality: Reserva Biológica das Perobas, Córrego Adelaide; decimalLatitude: -23.8472; decimalLongitude: -52.7389; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 12; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia ochroischion*; identifiedBy: N. O. Paiva; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3F8C20F5-90FA-5960-B3A4-7C57CB5F26AD

Distribution: Brazil.

Notes: Specimens from Paraná show variations in structure and colouration when compared to the original description. In the material above, the apical portion of the middle femur and most of the fore femur dorsally are yellowish. Additionally, both males and females bear a row of five to seven spines on the hind femur. These are the first records from Paraná and the South Region of Brazil (Fig. 10D-E, Fig. 11C).

Rhagovelia robusta Gould, 1931

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *robusta*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, brejo na trilha; decimalLatitude: -23.8883; decimalLongitude: -52.8086; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia robusta*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 433E47B7-2710-5904-A394-768B56266F8D

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *robusta*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 7; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia robusta*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 431985F7-0774-57F2-8946-D020E3A093DF

c. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *robusta*; scientificNameAuthorship: Gould, 1931; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 7; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Rhagovelia robusta*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3D015527-E554-5019-B86E-41B37C873F26

Distribution: Brazil, Paraguay and Argentina.

Notes: First records from Paraná (Fig. 10F, Fig. 11C). Previously reported from Santa Catarina and Rio Grande do Sul (Polhemus 1997, Rodrigues et al. 2021).

Rhagovelia trepida Bacon, 1948

Materials

a. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *trepida*; scientificNameAuthorship: Bacon, 1948; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, riacho pequeno ao lado da estrada; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 2; sex: male;

lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia trepida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 221B4923-41B9-5240-A69A-18581E530492

b. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *trepida*; scientificNameAuthorship: Bacon, 1948; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Rio dos Bugres; decimalLatitude: -26.2772; decimalLongitude: -49.5344; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 4; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Rhagovelia trepida*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 8F22CFD3-02F2-5511-AC08-826575894EE8

c. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *trepida*; scientificNameAuthorship: Bacon, 1948; stateProvince: Santa Catarina; municipality: Rio Negrinho; locality: Rio dos Bugres; decimalLatitude: -26.2772; decimalLongitude: -49.5344; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 9; sex: female; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Rhagovelia trepida*; identifiedBy: I. R. S. Cordeiro; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 2192AA3C-D33C-51A7-A4CF-92C14058CF21

d. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *trepida*; scientificNameAuthorship: Bacon, 1948; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 7; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia trepida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C5E7777E-B2E6-5CAE-A5AB-6FB9A5BD6177

e. taxonRank: species; genus: *Rhagovelia*; specificEpithet: *trepida*; scientificNameAuthorship: Bacon, 1948; stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, riacho pequeno; decimalLatitude: -27.052; decimalLongitude: -49.088; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 5; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Rhagovelia trepida*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 4F328629-6494-59D8-BDDB-59C50A23B6C6

Distribution: Brazil.

Notes: Previously reported from Paraná, Santa Catarina and Rio Grande do Sul (Polhemus 1997, Magalhães et al. 2023).

Subfamily Vellinae Brullé, 1836

Genus *Oiovelia* Drake & Maldonado-Capriles, 1952

Oiovelia brasiliensis Moreira, Nessimian & Rúdio, 2010

Materials

a. taxonRank: species; genus: *Oiovelia*; specificEpithet: *brasiliensis*; scientificNameAuthorship: Moreira, Nessimian & Rúdio, 2010; stateProvince: Santa Catarina; municipality: Águas Mornas; decimalLatitude: -27.694; decimalLongitude: -48.825; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Oiovelia brasiliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 6B3D53EF-85A4-54E4-9AB2-ACD11E9D2920

b. taxonRank: species; genus: *Oiovelia*; specificEpithet: *brasiliensis*; scientificNameAuthorship: Moreira, Nessimian & Rúdio, 2010; stateProvince: Santa Catarina; municipality: São Bonifácio; locality: Riacho Dona Terezinha, Montanha; decimalLatitude: -27.9088; decimalLongitude: -48.9126; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Oiovelia brasiliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C8C90455-7FA3-5C78-81A3-2F3F27D97AAD

c. taxonRank: species; genus: *Oiovelia*; specificEpithet: *brasiliensis*; scientificNameAuthorship: Moreira, Nessimian & Rúdio, 2010; stateProvince: Rio Grande do Sul; municipality: Cambará do Sul; locality: Parque Nacional de Aparados da Serra, Córrego Preá; decimalLatitude: -29.17; decimalLongitude: -50.09; samplingProtocol: "D" Net; year: 2016; month: IX; individualCount: 2; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Polizei; identificationID: *Oiovelia brasiliensis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 391CEE24-4065-5751-9613-0C5DBB25A24D

Distribution: Brazil and Argentina.

Notes: First records from Santa Catarina (Fig. 11B, Fig. 12A). Previously reported from Rio Grande do Sul (Moreira and Campos 2012, Rodrigues et al. 2021).

Oiovelia cunucunumana Drake & Maldonado-Capriles, 1952

Materials

a. taxonRank: species; genus: *Oiovelia*; specificEpithet: *cunucunumana*; scientificNameAuthorship: Drake & Maldonado-Capriles, 1952; stateProvince: Santa Catarina; municipality: Mafra; locality: Rio Negro; decimalLatitude: -26.2117; decimalLongitude: -49.6286; samplingProtocol: "D" Net; year: 2020; month: III; individualCount: 1; sex: male; lifeStage: adult; recordedBy: T. Roell & T. Polizei; identificationID: *Oiovelia cunucunumana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 45D878E9-1518-5E84-9A5F-AA67B996AC91

b. taxonRank: species; genus: *Oiovelia*; specificEpithet: *cunucunumana*; scientificNameAuthorship: Drake & Maldonado-Capriles, 1952; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 10; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Oiovelia cunucunumana*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 57B69026-644D-5C8D-BCAC-E0E4EB238877

c. taxonRank: species; genus: *Oiovelia*; specificEpithet: conucunumana; scientificNameAuthorship: Drake & Maldonado-Capriles, 1952; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Mouro; decimalLatitude: -23.8850; decimalLongitude: -52.8072; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 5; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Oiovelia* conucunumana; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: B5529779-1C0B-597A-802B-C099869A895B

Distribution: Colombia, Venezuela, French Guiana, Brazil, Paraguay and Argentina.

Notes: First records from Paraná (Fig. 11B, Fig. 12B). Previously reported from Santa Catarina (Spangler 1986).

Figure 12. doi

Veliidae from the South Region of Brazil, habitus, dorsal view. **A, B, D** Male; **C.** Female. **A** *Oiovelia braziliensis*; **B** *Oiovelia cunucunumana*; **C** *Stridulivelia astralis*; **D** *Stridulivelia ayacucho* specimen damaged due to dehydration.

Genus *Platyvelia* Polhemus & Polhemus, 1993

Platyvelia brachialis (Stål, 1860)

Materials

a. taxonRank: species; genus: *Platyvelia*; specificEpithet: *brachialis*; scientificNameAuthorship: (Stål, 1860); stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 3; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Platyvelia brachialis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C55A1009-9FBF-5BCB-9CE4-63A54464B522

b. taxonRank: species; genus: *Platyvelia*; specificEpithet: *brachialis*; scientificNameAuthorship: (Stål, 1860); stateProvince: Santa Catarina; municipality: Blumenau; locality: Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia, Lagoa Negra; decimalLatitude: -27.0532; decimalLongitude: -49.0878; samplingProtocol: "D" Net; year: 2017; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano & T. Malacarne; identificationID: *Platyvelia brachialis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 3ABAD684-778F-5209-ADB0-3E5BAEC99122

Distribution: United States, Mexico, Belize, Guatemala, Cuba, Jamaica, Dominican Republic, Haiti, El Salvador, Nicaragua, Grenada, Costa Rica, Panama, Trinidad & Tobago, Colombia, Venezuela, Suriname, Brazil, Peru and Argentina.

Notes: Previously reported from Santa Catarina (Polhemus and Polhemus 1993, Rodrigues et al. 2021).

Genus *Stridulivelia* Hungerford, 1929

Stridulivelia astralis (Drake & Harris, 1938)

Material

a. taxonRank: species; genus: *Stridulivelia*; specificEpithet: *astralis*; scientificNameAuthorship: (Drake & Harris, 1938); stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Lagoa; decimalLatitude: -23.8894; decimalLongitude: -52.8144; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Stridulivelia astralis*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: C386A4A0-A35E-5408-A722-930A1E41906A

Distribution: Brazil, Paraguay and Argentina.

Notes: First record from Paraná (Fig. 11A, Fig. 12C). Previously reported from Rio Grande do Sul by Rodrigues et al. (2021).

Stridulivelia ayacucho Polhemus & Spangler, 1995

Materials

a. taxonRank: species; genus: *Stridulivelia*; specificEpithet: *ayacucho*; scientificNameAuthorship: Polhemus and Spangler, 1995; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: male; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Stridulivelia ayacucho*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 8711858B-24AF-5463-8C09-94FFA5BB170C

b. taxonRank: species; genus: *Stridulivelia*; specificEpithet: *ayacucho*; scientificNameAuthorship: Polhemus and Spangler, 1995; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas; decimalLatitude: -23.8797; decimalLongitude: -52.8194; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 2; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Stridulivelia ayacucho*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: ED299F73-BA59-5F0B-84CA-A8D42C2B1F06

c. taxonRank: species; genus: *Stridulivelia*; specificEpithet: *ayacucho*; scientificNameAuthorship: Polhemus and Spangler, 1995; stateProvince: Paraná; municipality: Tuneiras do Oeste; locality: Reserva Biológica das Perobas, Rio Saquarema; decimalLatitude: -23.8725; decimalLongitude: -52.7864; samplingProtocol: "D" Net; year: 2024; month: IV; individualCount: 1; sex: female; lifeStage: adult; recordedBy: C. F. B. Floriano; identificationID: *Stridulivelia ayacucho*; identifiedBy: C. F. B. Floriano; institutionCode: CEIOC; basisOfRecord: PreservedSpecimen; occurrenceID: 929C4537-11F9-5900-839E-5BEDEA0DAEE3

Distribution: Venezuela, Suriname, Guyana, Brazil, Peru, Bolivia, Paraguay and Argentina.

Notes: First records from Paraná and the South Region of Brazil (Fig. 11D, Fig. 12A).

Discussion

Before this study, 61 species of Gerromorpha had been recorded from the South Region of Brazil (Moreira 2025a, Moreira 2025b, Moreira 2025c, Moreira 2025d, Moreira 2025e). Our results include new distribution information for 45 species (Table 1), 36 of which are herein recorded for the first time from at least one of the three southern Brazilian States. Amongst them, *Microvelia lujanana* is recorded for the first time from Brazil, while 14 species are recorded for the first time from the South Region of the country (State abbreviations in parentheses): *Tachygerris adamsoni* (PR), *Microvelia hamadae* (PR), *Mi. hinei* (PR), *Mi. lujanana* (SC, RS), *Mi. picinguaba* (SC), *Mi. sousorum* (PR), *Rheumatobates minutus flavidus* (PR), *Hebrus parvulus* (SC), *Lipogomphus lacuniferus*

(SC), *Hydrometra caraiba* (PR), *Rhagovelia brunae* (PR), *Rha. henryi* (SC), *Rha. ochroischion* (PR) and *S. ayacucho* (PR). Our data increase the number of semi-aquatic bugs known from the South Region from 60 to 75.

Table 1.

Checklist of Gerromorpha from the South Region of Brazil. PR: Paraná; SC: Santa Catarina; RS: Rio Grande do Sul; N: New record; P: Previously recorded; - No record.

Taxa	PR	SC	RS	References
Gerridae				
Charmatometrinae				
***Brachymetra* Mayr, 1865**				
B. albinervus albinervus (Amyot & Serville, 1843)	N	N	P	Rodrigues et al. (2021)
B. furva Drake, 1957	P	-	-	Rodrigues et al. (2012)
Gerrinae				
***Limnogonus* Stål, 1868**				
L. aduncus aduncus Drake & Harris, 1933	P	P	-	Moreira et al. (2011b), Moreira and Campos (2012), Rodrigues et al. (2012)
L. ignotus Drake & Harris, 1934	-	P	P	Moreira et al. (2011b)
L. profugus Drake & Harris, 1930	-	-	P	Rodrigues et al. (2021)
***Neogerris* Matsumura, 1913**				
N. lubricus (White, 1879)	-	N	P	Rodrigues et al. (2021)
***Tachygerris* Drake, 1957**				
T. adamsoni (Drake, 1942)	N	-	-	
Halobatinae				
***Halobates* Eschscholtz, 1822**				
H. micans Eschscholtz, 1822	P	P	-	Andres et al. (2003), Dias and Lopes (2009)
Microveliinae				
***Husseyella* Herring, 1955**				
H. halophila Drake, 1958	-	P	-	Drake (1958a), Floriano et al. (2024)
***Microvelia* Westwood, 1834**				
M. arca Drake, 1958	-	P	-	Drake (1958a)
M. braziliensis McKinstry, 1937	N	P	P	Drake and Plaumann (1955), Rodrigues et al. (2021)

M. hamadae dos Santos, Rodrigues, Couceiro & Moreira, 2021	N	-	-	
M. hambletoni Drake, 1951	N	P	N	Drake (1951)
M. hinei Drake, 1920	N	-	-	
M. inannana Drake & Hottes 1952	-	P	-	Drake and Plaumann (1955)
M. ioana Drake & Hottes, 1952	-	P	N	Magalhães et al. (2021)
M. limaiana Drake, 1951	N	P	-	Drake (1951)
M. longipes Uhler, 1894	N	P	-	Drake and Plaumann (1955)
M. lujanana Drake, 1951	-	N	N	Drake (1951)
M. mimula White, 1879	N	P	P	Drake and Hussey (1951), Rodrigues et al. (2021)
M. minima Drake, 1952	N	P	N	Drake (1952a)
M. novana Drake & Plaumann, 1955	N	P	-	Drake and Plaumann (1955)
M. picinguaba Moreira & Barbosa, 2011	-	N	-	
M. pulchella Westwood, 1834	N	P	P	Drake and Plaumann (1955), Rodrigues et al. (2021)
M. sousorum dos Santos, Rodrigues, Couceiro & Moreira, 2021	N	-	-	
M. stellata Kirkaldy, 1902	-	P	-	Drake and Plaumann (1955)
M. venustatis Drake & Harris, 1933	N	P	-	Drake and Plaumann (1955)
***Xiphovelopsis* Floriano & Moreira, 2024**				
X. lacunana (Drake & Plaumann, 1953)	-	P	-	Polhemus (1977), Floriano et al. (2024)
Rhagadotarsinae				
***Rheumatobates* Bergroth, 1892**				
R. bonariensis (Berg, 1898)	N	P	P	Hungerford (1954), Neri et al. (2005), Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul (2014), Rodrigues et al. (2021)
R. crassifemur crassifemur Esaki, 1926	N	-	P	Rodrigues et al. (2021)
R. minimus Drake, 1958	-	P	-	Polhemus and Spangler (1989)
R. minutus flavidus Drake & Harris, 1942	N	-	-	
Trepobatinae				

***Halobatopsis* Bianchi, 1896**				
H. platensis (Berg, 1879)	P	-	P	Nieser (1970), Moreira and Campos (2012), Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul (2014), Rodrigues et al. (2021)
H. spiniventris Drake & Harris, 1936	P	P	P	Nieser and Melo (1999), Moreira and Campos (2012), Cordeiro and Moreira (2015), Rodrigues et al. (2021)
***Metrobates* Uhler, 1871**				
M. plaumanni plaumanni Hungerford, 1951	P	P	-	Hungerford (1951), Armisén et al. (2022)
M. vigilis Drake, 1958	-	P	-	Drake (1958b)
***Ovatametra* Kenaga, 1942**				
O. gualeguay Bachmann, 1966	-	-	P	Rodrigues et al. (2021)
O. thaumana Drake, 1959	P	-	-	Drake (1959)
Hebridae				
Hebrinae				
***Hebrus* Curtis, 1833**				
H. limnaeus Drake & Chapman, 1958	-	P	-	Drake and Chapman (1958)
H. parvulus Stål, 1860	-	N	-	
H. plaumanni Porter, 1952	-	P	-	Porter (1952)
***Lipogomphus* Berg, 1879**				
L. lacuniferus Berg, 1879	-	N	-	
Hydrometridae				
Hydrometrinae				
***Hydrometra* Latreille, 1797**				
H. argentina Berg, 1879	P	P	P	Neri et al. (2005), University of California, Berkeley (2009), Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul (2014), Rodrigues et al. (2021)
H. caraiba Guérin-Méneville, 1856	N	-	-	
H. fruhstorferi Hungerford & Evans, 1934	P	P	N	Drake (1952b), Cordeiro and Moreira (2015)
H. sztolcmani Jaczewski, 1928	P	-	P	Jaczewski (1928a), Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul (2014)
Mesoveliidae				
Mesoveliinae				

***Mesovelia* Mulsant & Rey, 1852**				
M. amoena Uhler, 1894	P	N	-	Jaczewski (1928b)
M. bila Jaczewski, 1928	P	P	N	Jaczewski (1928b), Floriano et al. (2017)
M. mulsanti White, 1879	P	P	P	Jaczewski (1928b), Neering (1954), Rodrigues et al. (2021)
Veliidae				
Rhagoveliinae				
***Rhagovelia* Mayr, 1865**				
R. brunae Magalhães & Moreira, 2016	N	-	-	
R. henryi Polhemus, 1997	-	N	-	
R. janeira Drake, 1953	P	P	P	Bacon (1956), Nieser and Melo (1997), Polhemus (1997), Nieser and Polhemus (1999), Cordeiro and Moreira (2015)
R. lucida Gould, 1931	P	P	P	Bacon (1956), Polhemus (1997), Moreira and Campos (2012), Cordeiro and Moreira (2015)
R. novana Drake & Plaumann, 1955	-	-	P	Museo Civico di Rovereto (2010)
R. occulcata Drake, 1959	P	N	-	Drake (1959)
R. ochroischion Nieser & Melo, 1997	N	-	-	
R. paulana Drake, 1953	-	P	-	Bacon (1956)
R. plaumanni Polhemus, 1997	P	P	P	Polhemus (1997)
R. rivulosa Polhemus & Polhemus, 1985	-	P	P	Polhemus and Polhemus (1985), Nieser and Melo (1999), Rodrigues et al. (2021)
R. robusta Gould, 1931	N	P	P	Polhemus (1997), Rodrigues et al. (2021)
R. sabrina Drake, 1958	P	P	-	Nieser and Polhemus (1999)
R. sooretama Moreira, Nessimian & Rúdio, 2010	P	-	-	Moreira and Campos (2012)
R. thaumana Drake, 1958	-	P	P	Drake (1958a), Moreira and Campos (2012)
R. trepida Bacon, 1948	P	P	P	Polhemus (1997), Magalhães et al. (2023)
R. zela Drake, 1959	-	P	-	Drake (1959)
Veliinae				
***Callivelia* Polhemus 2021**				
C. bipunctata (Rodrigues, Moreira, Nieser, Chen & Melo, 2014)	-	-	P	Rodrigues et al. (2021)
***Oiovelia* Drake & Maldonado-Capriles, 1952**				

O. brasiliensis Moreira, Nessimian & Rúdio, 2010 (Fig. 12)	-	N	P	Moreira and Campos (2012), Rodrigues et al. (2021)
O. cunucunumana Drake & Maldonado-Capriles, 1952 (Fig. 12)	N	P	-	Spangler (1986)
***Paravelia* Breddin, 1898**				
P. bachmanni Rodrigues & Moreira, 2016	-	P	-	Rodrigues and Moreira (2016)
P. bromelicola Rodrigues & Moreira, 2016	-	P	-	Rodrigues and Moreira (2016)
P. capixaba Moreira, Nessimian and Rúdio, 2010	-	-	P	Rodrigues et al. (2021)
***Platyvelia* Polhemus & Polhemus, 1993**				
P. brachialis (Stål, 1860)	-	P	-	Polhemus and Polhemus (1993), Rodrigues et al. (2021)
***Steinovelia* Polhemus & Polhemus, 1993**				
S. virgata (White, 1879)	-	P	P	Polhemus and Polhemus (1993), Moreira et al. (2020), Heiss et al. (2022)
***Stridulivelia* Hungerford, 1929**				
S. astralis (Drake & Harris, 1938) (Fig. 12)	N	-	P	Rodrigues et al. (2021)
S. ayacucho Polhemus & Spangler, 1995 (Fig. 12)	N	-	-	

Our fieldwork included the following protected areas: Parque Nacional Aparados da Serra, Parque Nacional da Serra Geral, Parque Nacional da Serra do Itajaí, Parque Natural Municipal Nascentes do Garcia and Reserva Biológica das Perobas. Several species were collected exclusively within them, including *Hydrometra caraiba*, *H. fruhstorferi*, *Lipogomphus lacuniferus*, *Mesovelia amoena*, *Microvelia hamadae*, *Mi. hinei* *Mi. picinguaba*, *Mi. sousorum*, *Rheumatobates minutus flavidus*, *Rhagovelia brunae*, *Rha. ochroischion*, *Rha. robusta*, *Platyvelia brachialis*, *Stridulivelia astralis*, *S. ayacucho* and *Tachygerris adamsoni*. This highlights the importance of these sites in maintaining populations of semi-aquatic bugs.

Acknowledgements

We thank the curators of the collections where the material examined is deposited: Márcio Felix (CEIOC), Daniela Takiya (DZRJ), Talita Roell (MZUSP) and Thomas Henry (NMNH). We also thank Leticia Nery (Laboratório de Entomologia, Instituto Oswaldo Cruz), who organised our specimens in the CEIOC. CFBF thanks the Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ) for a post-doctoral fellowship (process 204.230/2021) and Dr. Thiago Polizei for collecting and sending several Gerromorpha specimens from Paraná and Santa Catarina. JMSR benefitted from post-doctoral fellowship provided by the Conselho Nacional de

Desenvolvimento Científico e Tecnológico (CNPq; #150954/2023-9). NOP benefitted from a doctorate scholarship provided by the Coordination for the Improvement of Higher EducationPersonnel (CAPES, process 88887.971126/2024-00). CLF benefitted from a doctorate scholarship provide by CAPES — Finance Code 001. FFFM received financial support from FAPERJ (processes E-26/203.960/2024 and E-26/201.438/2025) and CNPq (processes 307115/2023-2, 402871/2023-5, and 441670/2024-5).

References

- Andres HG, John H-, Zelck C (2003) Biological oceanography and marine taxonomy [in WHP Cruise and Data Information]. https://cchdo.ucsd.edu/data/5825/a09do.txt. Accessed on: 2024-7-23.
- Armisén D, Viala S, Cordeiro IRS, Crumière AJJ, Hendaoui E, Bouquin AL, Duchemin W, Santos E, Toubiana W, Vargas-Lowman A, Floriano CFB, Polhemus D, Wang Y, Rowe L, Moreira FFF, Khila A (2022) Transcriptome-based phylogeny of the semi-aquatic bugs (Hemiptera: Heteroptera: Gerromorpha) reveals patterns of lineage expansion in a series of new adaptive zones. Molecular Biology and Evolution 39 (11): 1-19. https://doi.org/10.1093/molbev/msac229
- Bacon JA (1956) A taxonomic study of the genus *Rhagovelia* (Hemiptera, Veliidae) of the Western Hemisphere. University of Kansas Science Bulletin 38: 695-913.
- Barbosa JF, Rodrigues HDD (2015) The true water bugs (Nepomorpha). In: Panizzi AR, Grazia J (Eds) True bugs (Heteroptera) of the Neotropics. Springer Science+Business Media, Dordrecht, 159-199 pp. https://doi.org/10.1007/978-94-017-9861-7_7
- Cordeiro IRS, Moreira FFF (2015) New distributional data on aquatic and semiaquatic bugs (Hemiptera: Heteroptera: Gerromorpha & Nepomorpha) from South America. Biodiversity Data Journal 3: 1-30. https://doi.org/10.3897/bdj.3.e4913
- Dias JF, Lopes CL (2009) Occurrence, distribution and abundance of *Halobates micans* Eschscholtz, 1822 (Heteroptera, Gerridae) along the southeastern Brazilian coast. Brazilian Journal of Biology 69 (1): 67-73. https://doi.org/10.1590/s1519-69842009000100008
- Drake CJ (1951) New Neogaean water-striders (Hemiptera-Veliidae). Proceedings of the Biological Society of Washington 64: 75-82.
- Drake CJ, Hussey RF (1951) Concerning some American *Microvelia* (Hemiptera: Veliidae). Florida Entomologist 34 (4): 137-145. https://doi.org/10.2307/3492444
- Drake CJ (1952a) Two new *Microvelia* Westwood (Hemiptera: Veliidae). Bulletin of the Brooklyn Entomological Society 47: 13-15.
- Drake CJ (1952b) New Neotropical Hydrometridae (Hemiptera). Acta Entomologica Musei Nationalis Pragae 26: 1-7.
- Drake CJ, Plaumann F (1955) Some *Microvelia* from southern Brazil (Hemiptera: Veliidae). Bulletin of the Southern California Academy of Sciences 54: 22-24.
- Drake CJ (1958a) New Neotropical Veliidae (Hemiptera). Proceedings of the Biological Society of Washington 71: 133-142.
- Drake CJ (1958b) A new Neotropical halobatid (Hemiptera: Gerridae). Bulletin of the Brooklyn Entomological Society 53: 100-102.

- Drake CJ, Chapman HC (1958) New Neotropical Hebridae, including a catalogue of the American species (Hemiptera). Journal of the Washington Academy of Sciences 48 (10): 317-326.
- Drake CJ (1959) Three new water-striders from Brazil (Hemiptera). Bulletin, Southern California Academy of Sciences 58 (2): 107-111.
- Floriano CFB, Moreira FFF, Bispo PC (2017) New records of Gerromorpha (Insecta: Hemiptera: Heteroptera) from the Neotropical Region. Transactions of the American Entomological Society 143 (2): 103-117. https://doi.org/10.3157/061.143.0202
- Floriano CFB, Rodrigues JMS, Moreira FFF (2024) *Xiphovelopsis*, a new South American genus of Microveliinae (Hemiptera, Heteroptera, Gerridae), with the description of a new species. PLOS One 19 (11): e0313408. https://doi.org/10.1371/journal.pone.0313408
- Heiss E, Eckelt A, Lederwasch M, Unterasinger R (2022) Die Heteropterensammlung Ernst Heiss im Tiroler Landesmuseum Ferdinandeum. Teil IX: Gerromorpha II: Familien Mesoveliidae, Hebridae, Hydrometridae, Hermatobatidae, Veliidae. Linzer Biologische Beiträge 54 (1): 149-173. URL: https://epub.jku.at/download/pdf/8293515.pdf
- Hungerford HB (1951) A new *Metrobates* from Brazil, South America (Hemiptera-Gerridae). Journal of the Kansas Entomological Society 24 (2): 72-73.
- Hungerford HB (1954) The genus *Rheumatobates* Bergroth (Hemiptera-Gerridae). University of Kansas Science Bulletin 36 (7): 529-588. https://doi.org/10.5962/bhl.part.24625
- Instituto Brasileiro de Geografia e Estatística (2025) Cidades e estados. https://www.ibge.gov.br/ cidades-e-estados.html?view=municipio. Accessed on: 2025-5-16.
- Jaczewski T (1928a) Hydrometridae from the state of Paranà. Prace Zoologiczne Polskiego Państwowego Muzeum Przyrodniczego 7: 81-84.
- Jaczewski T (1928b) Mesoveliidae from the state of Paranà. Prace Zoologiczne Polskiego Państwowego Muzeum Przyrodniczego 7: 75-80.
- Magalhães OM, Cordeiro IRS, Bichuette ME, Moreira FFF (2021) New records of cave-inhabiting Gerromorpha (Insecta, Hemiptera, Heteroptera) from Brazil. CheckList 17 (4): 1137-1146. https://doi.org/10.15560/17.4.1137
- Magalhães OM, Floriano CFB, Moreira FFF (2023) New species, new records and key to the species of the *Rhagovelia itatiaiana* group (Hemiptera, Heteroptera, Veliidae) from Brazil. Biodiversity Data Journal 11: 1-14. https://doi.org/10.3897/BDJ.11.e105614
- Molano F, Camacho-Pinzón DL, Serrato-Hurtado C (2005) Gerridae (Heteroptera: Gerromorpha) de Colombia. Biota Colombiana 6 (2): 163-172. URL: https://revistas.humboldt.org.co/index.php/biota/article/view/156/155
- Moreira FFF, Barbosa JF, Ribeiro JRI, Alecrim VP (2011a) Checklist and distribution of semiaquatic and aquatic Heteroptera (Gerromorpha and Nepomorpha) occurring in Brazil. Zootaxa 2958 (1): 1-74. https://doi.org/10.11646/zootaxa.2958.1.1
- Moreira FFF, Ribeiro JRI, Nessimian JL, Itoyama MM, Castanhole MMU, Pereira LLV (2011b) New records and distribution expansions for Neotropical water-striders (Insecta: Heteroptera: Gerromorpha). Check List 7 (3). https://doi.org/10.15560/7.3.303
- Moreira FFF, Campos GGF (2012) New distributional data concerning some Gerromorpha (Insecta: Hemiptera: Heteroptera) from Brazil. CheckList 8 (3): 542-547. https://doi.org/10.15560/8.3.542

- Moreira FFF (2015) The semiaquatic Gerromorphans. In: Panizzi AR, Grazia J (Eds) True bugs (Heteroptera) of the Neotropics. Springer, Dordrecht, 113-156 pp. https://doi.org/10.1007/978-94-017-9861-7_6
- Moreira FFF, Floriano CFB, Rodrigues HDD, Sites R (2020) Revision of the American genus *Steinovelia* Polhemus & Polhemus, 1993 (Heteroptera: Gerromorpha: Veliidae). Zootaxa 4729 (1): 077-091. https://doi.org/10.11646/zootaxa.4729.1.5
- Moreira FFF (2025a) Gerridae in Catálogo Taxonômico da Fauna do Brasil. http://fauna.jbrj.gov.br/fauna/faunadobrasil/2377. Accessed on: 2025-5-16.
- Moreira FFF (2025b) Hebridae in Catálogo Taxonômico da Fauna do Brasil. http://fauna.jbrj.gov.br/fauna/faunadobrasil/1882. Accessed on: 2025-5-16.
- Moreira FFF (2025c) Hydrometridae in Catálogo Taxonômico da Fauna do Brasil. http://fauna.jbrj.gov.br/fauna/faunadobrasil/948. Accessed on: 2025-5-16.
- Moreira FFF (2025d) Mesoveliidae in Catálogo Taxonômico da Fauna do Brasil. http://fauna.jbrj.gov.br/fauna/faunadobrasil/1841. Accessed on: 2025-5-16.
- Moreira FFF (2025e) Veliidae in Catálogo Taxonômico da Fauna do Brasil. http://fauna.jbrj.gov.br/fauna/faunadobrasil/1596. Accessed on: 2025-5-16.
- Museo Civico di Rovereto (2010) Patrimonio Online e WebGis. http://www.museocivico.rovereto.tn.it. Accessed on: 2010-5-17.
- Neering T (1954) Morphological variations in *Mesovelia mulsanti* (Hemiptera, Mesoveliidae). University of Kansas Science Bulletin 36: 125-148.
- Neri DB, Kotzian CB, Siegloch AE (2005) Composição de Heteroptera aquáticos e semi-aquáticos na área de abrangência da U.H.E. Dona Francisca, RS, Brasil: fase de pré-enchimento. Iheringia, Série Zoologia 95 (4): 421-429. https://doi.org/10.1590/s0073-47212005000400013
- Nieser N (1970) Gerridae of Suriname and the Amazon with additional records of other Neotropical species. Studies on the fauna of Suriname and other Guyanas 12: 94-138.
- Nieser N, Melo AL (1997) Os heterópteros aquáticos de Minas Gerais. Guia Introdutório com chave de identificação para as espécies de Nepomorpha e Gerromorpha. Editora UFMG, Belo Horizonte, 177 pp.
- Nieser N, Melo AL (1999) A new species of *Halobatopsis* (Heteroptera: Gerridae) from Minas Gerais (Brazil), with a key to the species. Entomologische Berichten 59 (7): 97-102.
- Nieser N, Polhemus DA (1999) Four New Species of *Rhagovelia* (Heteroptera: Veliidae) from Minas Gerais (Brazil), with a Key to the Regional Species of the *angustipes* Complex. Aquatic Insects 21 (1): 53-76. https://doi.org/10.1076/aqin.21.1.53.4540
- Padilla-Gil DN, Moreira FFF (2013) Checklist, taxonomy and distribution of the *Rhagovelia* Mayr, 1865 (Hemiptera: Heteroptera: Veliidae) of the Americas. Zootaxa 3640 (3): 409-424. https://doi.org/10.11646/zootaxa.3640.3.5
- Polhemus DA (1997) Systematics of the genus *Rhagovelia* Mayr (Heteroptera: Veliidae) in the Western Hemisphere (exclusive of the *angustipes* complex). Entomological Society of America, Lanham, 385 pp.
- Polhemus JT (1977) Type-designations and other notes concerning Veliidae (Insecta: Hemiptera). Proceedings of the Entomological Society of Washington 79 (4): 637-648.
- Polhemus JT, Polhemus DA (1985) Studies on Neotropical Veliidae (Hemiptera) VIII: new species and notes. Pan-Pacific Entomologist 61 (2): 163-169.

- Polhemus JT, Spangler PJ (1989) A new species of *Rheumatobates* Bergroth from Ecuador and distribution of the genus (Heteroptera: Gerridae). Proceedings of the Entomological Society of Washington 91 (3): 421-428.
- Polhemus JT, Polhemus DA (1993) Two new genera for New World Veliinae (Heteroptera: Veliidae). Journal of the New York Entomological Society 101 (3): 391-398.
- Polhemus JT, Polhemus DA (2007) Global trends in the description of aquatic and semiaquatic Heteroptera species, 1758-2004. Tijdschrift voor Entomologie 150 (2): 271-288. https://doi.org/10.1163/22119434-900000230
- Polhemus JT, Polhemus DA (2008) Global diversity of true bugs (Heteroptera; Insecta) in freshwater. Hydrobiologia 595 (1): 379-391. https://doi.org/10.1007/s10750-007-9033-1
- Porter TW (1952) Three new species of Hebridae (Hemiptera) from the Western Hemisphere. Journal of the Kansas Entomological Society 25 (1): 9-12.
- Rodrigues HDD, Melo AL, Ferreira-Keppler RL (2012) New records of Gerromorpha (Insecta: Hemiptera: Heteroptera) from Brazil. Check List 8 (5): 908-913. https://doi.org/10.15560/8.5.908
- Rodrigues HDD, Moreira FFF (2016) Four new species of *Paravelia* (Hemiptera: Heteroptera: Veliidae) from Brazil, with notes on previously described species. Canadian Entomologist 148: 642-667. https://doi.org/10.4039/tce.2016.18
- Rodrigues HDD, Floriano CFB, Zettel H, Moreira FFF (2021) Revision of the American genus *Platyvelia* Polhemus & Polhemus, 1993 (Heteroptera: Gerromorpha: Veliidae). Revista Brasileira de Entomologia 65 (1): e20200120. https://doi.org/10.1590/1806-9665-rbent-2020-0120
- Rodrigues JMS, Magalhães OM, Joaquim EA, Ribeiro JRI, Moreira FFF (2021) Semiaquatic bugs (Hemiptera, Heteroptera, Gerromorpha) from Rio Grande do Sul, southern Brazil. CheckList 17 (5): 1323-1343. https://doi.org/10.15560/17.5.1323
- Secretaria do Meio Ambiente e Infraestrutura do Estado do Rio Grande do Sul (2014) Plano de Manejo. Parque Estadual do Delta do Jacuí. Accessed on: 2025-06-24.. URL: https://www.sema.rs.gov.br/upload/arquivos/202112/14144045-encarte-ii.pdf
- Spangler PJ (1986) Two new species of water-striders of the genus *Oiovelia* from the Tepui Cerro de la Neblina, Venezuela (Hemiptera: Veliidae). Proceedings of the Entomological Society of Washington 88 (3): 438-450.
- University of California, Berkeley (2009) Essig Museum of Entomology Collections Database. https://essigdb.berkeley.edu/. Accessed on: 2009-5-20.